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ABSTRACT

Most deficiencies of the Hungarian labor market emerge from a combination of the transition crisis and special features of the economy or transition process. The most crucial labor market problem is low employment. Negative impacts are high taxation and social security contributions; reduced investment, job creation, and economic growth; and people driven from the labor market who seek jobs in the black economy. While the unemployment rate has steadily decreased, employment has not increased significantly. Neither the structure of labor market policy nor its delivery system are effective in handling the problem of long-term unemployment. The most backward regions--the northeast, southwest and eastern border--are characterized by a disadvantageous industrial structure; low-quality infrastructure; lower average educational background; large Romany population; and less success in attracting investment. The tendency for students to enter vocational secondary schools rather than apprenticeship schools gives them a better chance to find jobs or continue education, but the curriculum cannot follow changes in the occupational structure of labor demand fast enough. A striking development is the increasing wage gap between the private and public sectors. (Appendixes include: additional tables and characteristics of the education system. Contain 37 references.) (YLB)

Background study on employment and labour market in Hungary

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The European Training Foundation is an agency of the European Union which works in the field of vocational education and training in Central and Eastern Europe, the New Independent States, Mongolia and the Mediterranean partner countries and territories. The Foundation also provides technical assistance to the European Commission for the Tempus Programme.

Foreword

This study is part of the preparation process for the accession of Hungary to the European Union. The study gives a factual description to allow an evaluation of the readiness of the country to participate in the Single Market with respect to the labour market and employment policies, and also identifies key issues in this area to be addressed in the pre-accession process. The study provides a background for the employment reviews prepared by Directorate General V of the European Commission and has been written under the supervision of DG V and the European Training Foundation.

The study was written according to the Terms of Reference of DG V and the European Training Foundation, and an outline and guidelines provided by the EU advisers: Susanne Oxenstierna, Stockholm University, and, especially for Chapter 6, Japp de Koning, Netherlands Economic Institute. The drafts of the report were discussed at three workshops during spring 1999 in which the national experts from the Central and East European Countries writing the corresponding background studies for their countries participated. Final editing was done by Ms Oxenstierna, and Mr Timothy Chamberlain of Chamberlain Language Services, Stockholm.

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Barcelona, July 1999

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Executive summary

Hungary is one of the transition countries that has achieved the most in transforming its centrally planned economy to a market one. Most market institutions have been introduced and privatisation has gone further than in many Western countries (electricity supply, power stations and natural gas providers are partly or totally privatised). By the late 1990s, in most respects, the Hungarian economy is working as a standard market economy. In our view this is also (though to a lesser extent) true in the case of labour issues. On the one hand this enables us to view the Hungarian labour market from the market economy point of view, while on the other hand it qualifies Hungary as one of the candidates to join the EU.

However, the analysis of this report sheds light on many deficiencies of the Hungarian labour market. Most of them emerge from a combination of the transition crisis and some special features of the Hungarian economy or the Hungarian transition process itself.

Low labour force participation

Probably the most crucial problem in the Hungarian labour market is low labour force participation (and consequently low employment rates). This has several negative impacts on the whole economy: the employed population has to finance an inactive population of considerable size. This is only possible with high redistribution, hence high taxation and social security contributions. However, this increases labour costs and consequently reduces investment, job creation and economic growth. From the social point of view, citizens outside the labour force receive either pensions or some type of social income, both of which indicate that they are located at the lower end of the income scale. Therefore, low labour force participation means also a higher incidence of poverty. A third negative consequence of low labour force participation is that if many people have been driven out of the labour market, they may look for jobs in the black economy.

On the basis of this analysis it is obvious that solving this problem requires a complex treatment including incentives for job creation by lowering payroll taxation, improving programmes targeting the long-term unemployed, channelling black economy activities into the legal sphere, and regional development policies.

High level of payroll taxation

The high level of payroll taxation drives people into the shadow economy in two ways. One of them is that high tax rates mean that tax evasion pays off more and is considered socially acceptable. The more indirect way is that it means higher labour costs and therefore leads to less job creation, so that potential employees have to leave the labour force and look for jobs in the illegal sector. Moreover, the Laffer-curve argument is probably also true for Hungary, that is, at lower taxation, citizens would be more willing to meet their tax duties.

Large share of the shadow economy

As pointed out below, the large share of the shadow economy is closely related to the two issues raised above. Some elements of the black economy - tax evasion, trade of agricultural products without receipts and black employment - may be reduced by economic policies. The introduction of the temporary workers' certificate in agriculture together with tighter supervision has resulted in a decline in black employment. Farmers increasingly employ temporary workers officially. This evidence indicates that in this sector clear and simple legislation and tighter supervision would help to legalise currently shadow activities. However, in the long run only a reduction of payroll taxation is sufficient to fight the shadow economy, because incentives to hide income are too high in the current framework.

Long-term unemployed

If we look only at the time pattern of the Hungarian unemployment rate, we may conclude that since 1993 things have improved to a great extent, since the unemployment rate has steadily decreased. However, at the same time, employment has not increased significantly until recent years, i.e. a huge proportion of the unemployed left the labour force. Another indication of this is the considerable discrepancy between ILO and registered unemployment: in April 1999 the difference was close to 4 percentage points.

Spells of unemployment typically conclude with the exhaustion of the entitlement period. There are two types of reasons for this phenomenon. The first is a general observation in the western world: labour demand is low for low-skilled employees. This effect is reinforced by the fact that these unemployed persons live in regions where labour demand is lower than the national average because they were more exposed to the transition shock. The other reason for the emergence of long-term unemployment derives from the fact that employers are averse to hiring unemployed people and particularly the long-term unemployed. They rationalise this practice by the fact that these people have lower attachment to the labour force and because during the spell of long-run unemployment their knowledge has depreciated. This attitude is complemented by the inefficiency of the local labour market centres in performing counselling and labour exchange activities.

The public employment service offices concentrate their efforts mainly on the administration and management of passive labour market measures and organising some active projects, and they are consequently not efficient in counselling and labour exchange. In consequence, a major proportion of employers fill their vacancies via other channels (particularly in the case of skilled blue-collar and white-collar jobs). A total of 1.1 % of GDP was spent on labour market policy in 1997; 9 % of this amount went to cover the expenses of employment services, 34 % for active measures (mostly subsidised employment), and the majority was spent on passive measures. However, according to available impact studies, subsidised employment is not really effective in channelling the long-term unemployed back into the labour market. On the other hand, the participation of the long-term unemployed in the more effective training programmes is low. Therefore the structure of labour market policy and its delivery system should be reformed in order to handle the problem of long-term unemployment.

Regional disparities

As in most spheres of the Hungarian economy, we can observe regional disparities in the labour market too. Regional inequalities have a very complex pattern. The most backward regions can be found in the north-east of Hungary, along the eastern border, and in the south-west. All of them are characterised by a disadvantageous industrial structure; either agriculture or heavy industry play (or played) an important role in the region. Moreover, they are both far from Budapest and from the Austrian border and are equipped with a low-quality infrastructure, particularly in transportation. The average educational background is also somewhat lower in these regions. Additionally, the majority of the Hungarian Romany population lives in these regions. Finally, mainly because of the above reasons, they have been less successful than other regions in attracting new foreign and domestic investment, which has widened the gap between them and the more developed central and north-western regions.

In consequence, labour force participation is lower in these regions, unemployment is higher, there is less job creation and wages are somewhat lower too. However, as indicated by the discussion in the previous paragraph, it is obvious that these labour market issues have to be solved within the framework of a more complex regional policy.

The labour market position of the Romany minority

In Hungary the Romany minority constitutes about 5 % of the total population. They have the most disadvantageous status in the Hungarian labour market, characterised by extremely low labour force participation, high unemployment, a very low educational background, a poor geographical location and high fertility. 84 % of Romany adults do not have a higher educational level than primary school (the non-Romany average is 44 %) and only 2 % completed more than 11 grades (34 % for non-Romanies).

Moreover, Romany pupils perform much worse in schools than the Hungarian average. Romany pupils are therefore inheriting the low educational background and consequently the rather difficult labour market situation of their parents.

Because of their low labour force participation and because of their traditional occupations, Romanies are more involved in all the types of the shadow economy. However, this increases the labour market discrimination and prejudices against them. We can therefore identify the two most important sources of their low labour market status: their low educational background and discrimination against them. Unfortunately discrimination can be observed not only in the labour market but at (primary) school level also. Although school segregation is prohibited by law, Romany pupils are often segregated in separate classes under the label of retarded classes. Often, this implies a lower quality of teaching in Romany classes.

The vocational education and training system as an active labour market measure

Training and in particular vocational training should play an important role in adapting the Hungarian labour force to new economic circumstances. With respect to initial vocational training, the tendencies are that students enter vocational secondary schools and grammar schools rather than apprenticeship schools, which is good from the labour perspective because this gives them a better chance both to find a job and to continue to higher educational levels. On the other hand, the curriculum of vocational education is not able to follow the changes in the occupational structure of labour demand due to technological change fast enough. This is due to the long administrative procedures on the one hand, and to the insufficient participation of firm and industrial organisations in forming the curriculum on the other hand.

Since there is very little data available on adult education (apart from publicly financed training of the unemployed), it is difficult to evaluate its impact on the flexibility of the Hungarian labour market. Occasional evidence indicates that it does more to help persons already employed to keep up with technological progress than to aid the (long-term) unemployed.

Increasing wage gap between the private and public sector

In Hungary, one of the most striking developments in the structure of wages is the increasing earnings gap between the private and public sector (public administration, health care, education). This is particularly true in the case of employees with college or university degrees. This has several negative consequences, the most important of which is that the well-qualified leave the public sector and the best graduates do not enter it. This results in a deterioration in the quality of these sectors, which is especially significant in the educational sector, since it is known that human capital is one of the most important factors in economic growth. At the same time, in public education there is an excess supply of teachers, so that salary improvements could be financed by layoffs. However, there are strong movements against teacher layoffs and school closures, despite the fact of the demographic decline. On the other hand, in higher education, without significant improvements in salaries universities will be unable to retain well-qualified (particularly) young professors.

In general the wage formation system in Hungary is very asymmetric. In the private sector wages are mostly set by individual bargaining and thus tend to represent market forces (productivity from the firm's point of view and labour market opportunities from the worker's point of view). This is because the minimum wage is kept at a rather low level and because trade unions are traditionally weak. Industry or even firm-level wage negotiations are therefore rare and limited to only some public utility industries and companies. This has made the Hungarian labour market more flexible, which was beneficial during the transition process, though from the social point of view it may put too much bargaining power in the hands of the employers. On the other hand, in the public sector wages are rather rigid and constrained by strict regulations. This is one of the reasons for the increasing public-private earnings gap. However, the budgetary situation of the Hungarian government still does not allow significant increases in public sector wages and salaries.

1. Introduction

1.1 The objectives of the study

The objective of this study is to provide a background analysis for the employment policy reviews prepared by Directorate General V of the European Commission on the accession countries.

This study describes the current state of Hungary in terms of the employment situation, the employment policy institutions, employment policy delivery mechanisms and the connection between vocational education and the labour market. It presents factual and descriptive material based on official data sources such as data published by the Hungarian Central Statistical Office, the National Bank of Hungary, the Ministry of Education and the National Labour Centre.

We analyse the trends in employment, labour force participation and unemployment. We give a detailed description of the wage formation system. We analyse the state of employment policy and its institutions. At the same time this background study provides a summary of the key issues which emerge from the analysis. Besides providing a background for the employment policy review this study tries to identify possible targets for the ESF.

1.2 Methodology

In this study we analyse the official statistics published in Hungary on employment-related issues and education. In order to ensure a reliable description of the employment policy, we have also met members of the public administration responsible for different areas of employment policy. We have also consulted other sources: publications of the World Bank and the International Labour Organisation, and publications by foreign and Hungarian labour economists on the Hungarian labour market.

The experts participating in the project are Réka Horváth and Árpád Ábrahám. We have both worked at the Institute of Economics of the Hungarian Academy of Science, and the latter expert is presently affiliated as a research fellow there. Both authors have participated in several projects on the analysis of the Hungarian labour market for different Hungarian and international institutions (Ministry of Economy, Hungarian National Bank, ILO, etc.). Chapters 1, 2.1, 3, 4 and 5 have been prepared by Ms. Horváth. Sections 2.2 and 2.3 and Chapters 7, 8 and 9 have been prepared by Mr. Ábrahám. Chapter 6 was drafted by Tibor Horváth and Tamás Köpeczi-Bócz of the Hungarian National Observatory, and was revised by Mr Ábrahám.

1.3 Limitations

The most serious problem we had to face when working on this study was the lack of reliable statistics in many cases. The first problem is that in Hungary there have been labour statistics using the definitions of the International Labour Organisation only since 1992. There is therefore no reliable information on the employment situation in the first two years of the transition period. Also, even later, some important statistics (such as labour force participation by educational attainment) were not published. Another problem is the active age. After 1992 we can obtain statistics either for the 15-60 or 15-74 age group but not for the 15-64 age group. However, for one period (the third quarter of 1998) we can calculate statistics also for the latter age group.

Although the missing statistics could be obtained from the micro-data of the Labour Force Survey, our task was to use the officially published data. This meant that we were often forced to disregard certain aspects in analysing the employment situation. At other times we lacked the correct time series for some variables. In these cases we used the information for the years for which we had data. A presentation of our data sources is available in Chapter 11.

In describing the employment policy, we had to face the problem that the new government, elected in May 1998, has reorganised the institutional framework of the Hungarian labour market and consequently the structure of the employment policy delivery mechanism. At the beginning of 1999, when we interviewed many of those responsible for the employment policy, the situation was still not clear. Moreover, among other things the government is planning to implement fundamental reforms in the tripartite system, taxation and health insurance, all closely related to the labour market. However, so far only the broad directions of the reforms are known.

2. Labour Market Situation in Hungary

2.1 *General trends*

The economic transformation that has taken place in Hungary in recent years started already in the eighties. During this decade the Hungarian economy featured very low productivity, inappropriate economic structures and growing imbalances. It was the Németh government (1988-1990) that made the first efforts to tighten fiscal and monetary policies and to liberalise prices. By 1988, a market-oriented tax-system was introduced. Also, there was a private sector of considerable size.

Changes in the Hungarian political system started in 1988 when the first parties other than the ruling Hungarian Socialist Workers' Party appeared. The first free elections were held in April 1990. The new government continued with the tight fiscal and monetary policies. At this time the economic situation of the country deteriorated with the collapse of the COMECON trade, the increasing oil prices and the depression in Europe.

Due to their low productivity, firms were not competitive in an international comparison. During the 1980s companies started to experience substantial losses, leading to the first problems in the labour market. In the beginning, the problem of excess employment was solved by the decreasing labour force participation of pensioners. The outdated economic structure caused problems not only on the labour market; inflation also started to grow as industrial production declined at the end of the last decade.

With the change of the political system in 1990 new features appeared in the Hungarian economy. The dramatic fall in production and high inflation were followed by the emergence of open unemployment. Many people withdrew from the labour force because of the lack of suitable jobs (Table 2.1).

The sectors of the economy that were most affected were the ones that produced for domestic and Eastern markets. These included the production of iron and steel, transport machinery, instrument engineering, agricultural chemicals and textiles. Agricultural production also fell dramatically.

In spite of the efforts of the first freely elected government, the Hungarian economy did not improve in the early 1990s. The balance of trade and balance of payments improved temporarily but in 1994 serious imbalances occurred. Inflation stayed above 20 %, while unemployment grew to 12.5% in the first quarter of 1993. The budgetary deficit was higher than the level permitted by the IMF and the foreign debt obligation increased.

After the transition shock of the early 1990s, first industrial production, since 1993, and then, since 1994, GDP have been growing. In 1995 the Hungarian government resorted to radical emergency stabilisation measures. The cut in the state budget, excise tax increases, broadening contributions to health and pension funds, and the devaluation of the Hungarian Forint slowed down the growth of industrial production but made it sustainable in the long run.

Table 2.1 Economic Development in Hungary 1989-1998

	Indices of GDP (1989=100)	GDP growth (%)	Growth of industrial production (%)	Inflation rate (%)	Unemployment rate (ILO)	Yearly change in number of employed (%)	Yearly change in labour productivity [4] (%)	Growth of gross real earnings (%)
1989	100.0	0.7	-5.0	17.2	-	-	-	-
1990	96.5	-3.5	-9.3	28.9	-	-	-	-0.2
1991	85.0	-11.9	-18.3	35.0	-	-	-	-3.7
1992	82.4	-3.1	-9.7	23.0	9.8	-	-	1.7
1993	81.8	-0.6	4.0	22.5	11.9	-6.3	6.1	-0.5
1994	84.1	2.9	9.6	18.8	10.7	-2.0	5.0	5.1
1995	85.4	1.5	4.6	28.2	10.2	-1.9	3.5	-8.9
1996	86.5	1.3	3.4	23.6	9.9	-0.8	2.1	-2.6
1997	90.3	4.4	11.1	18.3	8.7	-0.1	4.5	3.4
1998	94.9	5.1 [1]	12.8 [2]	14.3	7.8 [3]	1.9	3.1	3.5

Source: Hungarian National Bank (HNB), Central Statistical Office (CSO). [1] Average of 1st-3rd quarters of 1998. [2] Average of January-November 1998. [3] The sample of the Labour Force Survey (LFS) has been broadened from 1998, so data are not perfectly compatible with the latest survey outcomes. [4] GDP/employee.

The northern and north-eastern regions suffered most from the consequences of the transformation. These were the regions in which the economy was based on heavy industries and agriculture. Here the collapse of production was followed by the collapse of the labour market.

The fall in agricultural production was not temporary. This major sector lost its importance within the economy, and its contribution to GDP is now closer to the share of agriculture in Western economies. However, the share has not changed as a result of substantial industrial growth; the cause is rather the fact that Hungarian agriculture has never been able to recover from the loss of foreign (mainly ex-Soviet) markets and the penetration of better developed western agricultural products (Table 2.2).

Table 2.2 Structural changes in the economy 1989-1998 (yearly change in %)

	Industrial production	Employment in industry *	Labour productivity in industry [4]	Agricultural production	Employment in agriculture	Labour productivity in agriculture
1989	-5.0	-	-	-1.3	-	-
1990	-9.3	-	-	-4.6	-	-
1991	-18.3	-	-	-8.1	-	-
1992	-9.7	-	-	-16.5	-	-
1993	4.0	-9.7	15.2	-7.9	-24.0	21.2
1994	9.6	-4.2	14.4	-0.4	-6.3	6.3
1995	4.6	-3.2	8.1	2.7	-9.9	14.0
1996	3.4	-0.7	4.1	4.1	2.5	1.6
1997	11.1	1.5	9.5	-0.5	-0.4	-0.1
1998	12.8 [1]	4.3	8.1	-5.3 [2]	0.4	-5.7

*Source: Hungarian National Bank (HNB), Central Statistical Office (CSO). * Excluding persons on child care leave and including conscripts. [1] Average of January-November 1998. [2] Average of January-June 1998. [3] The sample of the Labour Force Survey (LFS) has been broadened from 1998, so data are not perfectly compatible with the latest survey outcomes. [4] GDP/employee.*

After the first years of the transition, favourable processes started on the labour market as well. Unemployment started to decrease in 1994 and real wages have been increasing since 1997. The decline in labour force participation stopped in 1998. Overall labour productivity has been increasing since 1992, although in 1997 and 1998 it decreased in agriculture.

In spite of these favourable processes the labour market situation in Hungary is very uneven across regions: in the more developed western counties and in the agglomeration of Budapest employment and labour force participation are higher than in the rest of the country. At the same time production is also growing faster here, indicating that regional differences may become even greater.

According to data on major industries and branches, the vigorous economic growth continued in 1998. In the first nine months industrial production increased by 13.9% compared with the corresponding period of the previous year. Inflation in 1998 was 4 percentage points less than in 1997.

Data on employment statistics show a similar picture. The number of persons employed at corporations with more than 10 employees and at public institutions grew by 0.4%. At the same time the labour force increased slightly. This is a very important achievement since our labour force participation rate is quite low in international comparison.

2.2 Wage structure, social security and taxes

Wage structure

The average net monthly earnings of employees in 1998 were 45000 HUF (about 200 USD), 3.6% more in real terms than in the previous year. The economic changes have had a powerful effect on wages and income. Two features in particular characterise the evolution of the wage structure in Hungary during the transition: declining (net) real wages and rising inequality (Table 2.3).

The previous, relatively high real wages of the decade before were no longer sustainable. Net real wages fell steadily between 1989 and 1993. If we compare the indices of gross real earnings in Table 2.1 with the indices of net real earnings in Table 2.3, we notice that in fact gross earnings were quite stable before 1994. It was mainly the rigidity of the personal income tax system (i.e., the fact that tax brackets did not follow inflation) that caused the sharp decline in real net earnings before 1994. In 1994, for the first time after the transition, there was an increase in real wages. But this was due more to the forthcoming elections than to the better economic situation. Moreover, the "election budget" of 1994 led the country to a financial crisis followed by restrictive budgetary and monetary measures. The effect of these measures can be seen in the sharp decline in wages in 1995 and 1996. Since 1996 real wages have been increasing again, but this time they are based on stable economic growth. In 1998 real net earnings grew by 3.6%.

Table 2.3 Average earnings 1989-1998

	Gross earnings per capita (HUF)	Gross earnings (yearly change, %)	Net earnings per capita (HUF)	Net earnings (yearly change, %)	Real net earnings (yearly change,%)	Exchange rate (HUF/USD)
1989	10 571	17.9	8 165	16.9	-	59.10
1990	13 446	28.6	10 108	21.7	-5.6	63.20
1991	17 934	30.0	12 948	25.5	-7.0	74.81
1992	22 294	25.1	15 628	21.3	-1.4	79.00
1993	27 173	21.9	18 397	17.7	-3.9	92.03
1994	33 309	24.9	23 049	25.3	5.5	105.13
1995[1]	38 900	16.8	25 891	12.6	-12.2	125.69
1996	46 837	20.4	30 544	17.4	-5.0	152.57
1997	57 270	22.3	38 145	24.1	4.9	186.75
1998	67 764	18.3	45 162	18.4	3.6	217.67[2]

Source: Central Statistical Office (CSO). [1]. Since 1995 only for private organisations with at least 10 employees and public institutions regardless of number of staff. [2]. November 1998.

The 1990s have also been characterised by increasing wage differentials. We can measure wage differentials along many dimensions, such as occupations, sectors and branches of the economy, regions, gender, and educational background. Unfortunately no source is available that discusses all these dimensions of earnings inequality using a common methodology, sample coverage and time period.

First, there was an increase in the difference between the wages of blue-collar and white-collar workers. Moreover, in the private sector, where the differences were already greater, they increased more. In 1998 the real net earnings of blue-collar workers grew by 2.5% in the private sector and by 3.4% in the public sector. Real earnings of white-collar employees grew much faster, by 5.5% in the private sector and 3.8% in the public sector.

Earnings differentials between different branches of the economy have also increased in the past year. Earnings typically grew most in the best-paying branches, such as financial services, real estate or the chemical industry (See Table A1). We must add that according to the Central Statistical Office, CSO, these figures may be substantially influenced by significant but occasional firm or industrial level wage changes. The results should therefore be treated with caution.

Regional wage differentials

Regional differences in wages are not so significant; however, Budapest and its agglomeration and the better developed western region, have higher average wages (Table 2.4). The differentials are also growing, but this is due to the different composition of economic activities and the labour force in different regions, and not to "pure" regional differences.

Table 2.4 Average wages of employees by county 1997*

Region	Average gross monthly earnings (HUF)	Average net monthly earnings (HUF)	Average gross earnings as % of the average	Average net earnings as % of the average
R1: Central Hungary	72 771	46 442	127.1	121.8
R2: Central Transdanubia	56 141	37 570	98.0	98.5
R3: Western Transdanubia	53 138	35 992	92.8	94.4
R4: Southern Transdanubia	50 654	34 655	88.4	90.9
R5: Northern Hungary	50 189	34 368	87.6	90.1
R6: Northern Great Plain	47 523	32 937	83.0	86.3
R7: Southern Great Plain	49 134	33 793	85.8	88.6
Outside the national border	33 199	24 256	58.0	63.6

*Source: CSO. * Data for private enterprises with more than 20 employees and public institutions regardless of staff numbers.*

In a recent paper, Kertesi and Köllô (1999a) analysed earnings and labour costs by means of a very detailed regression analysis using individual and firm-level data for the non-public sector. Their main conclusion is that controlling for firm-level productivity differentials, regional divergence in labour costs disappeared by 1996, although it was significant at the beginning of the transition. However, if we look at earnings after controlling for individual characteristics and sectoral

divisions, in Budapest and its agglomeration employees earned on average 5 % more than in the rest of the country. However, this gap is fully explained by the higher productivity of the firms in this region. On the other hand, both labour costs and earnings are 5 % lower in villages even after controlling for productivity differences.

These results suggest that although the Hungarian labour force is not very mobile, there are forces (maybe the investment behaviour of firms) that equalise earnings across regions (controlling for differences in the composition of the labour force, and different sectoral compositions and firm-level labour productivity). However, in the more backward village labour markets the earnings are lower. These differentials may be sustained in the long run since firms do not establish factories in villages due to a lack of a sufficient mass of available labour and the inferior infrastructure. On the other hand, lower living costs also imply lower reservation wages.

Private and public sector

An important dimension of inequality is the wage gap between the private and public sectors. Here we define public sector as the state budget sector: public administration, health care and education. In these sectors, wages are set in different ways. In the private sector, market forces have determined wages since the first years of the transition, while in the public sector a rather rigid and centrally controlled tariff system determines wages and salaries. There is, however, a significant difference between wage determination in the public administration (where civil servants are employed) and the other areas of public sector (like education, health, research, etc., where public employees are employed). In the first case the relevant law sets the wages for each bracket and provides for a limited deviation from the given amount (currently, minus 20 %, plus 40 % of the amount). Moreover, 40 % of the staff can be exempted from the wage-tariff system anyway, paying them individually determined salaries based on the decision of the minister. In the case of the public employees the relevant law sets only the minimum amount for each bracket and allows free (collective and/or individual) bargaining above that floor. Thus market forces could influence wages somewhat in the public sector, although their impact is much weaker (in most fields of the public service) than in the private sector, due to the general financial constraints of the public sector.

Table 2.5 Public-private earnings comparisons by educational level, (private sector=100)

	1986			1996		
Sector	0-11 grades	Upper secondary school	Higher education	0-11 grades	Upper secondary school	Higher education
Public administration	73	88	90	76	84	63
Public education	70	84	75	65	63	42
Higher education	80	87	77	71	61	53
Health services	80	80	98	78	70	55

Source: National Labour Centre, see Hercog at al. (1998)

In Tables 2.5 and 2.6 we present some comparisons of earnings in these two spheres before the transition and in 1996 (more recent figures are not available).

Each section of the public sector lags behind the private sector at each educational level. However, while public sector employees without upper secondary education kept their position rather stable after the transition, for employees with upper secondary education and especially those with a college/university degree, the gap between private and public sector salaries increased sharply. For instance, while health care employees with a college/university degree earned on average 98 % of the earnings of private sector employees with a similar educational background in 1986, by 1996 this proportion had declined to 55 %. Similar patterns can be observed in education and public administration.

Table 2.6 Relative earnings position of certain occupations in public administration and in the private sector (national average=100)

	1986		1996	
	Public administration	Private sector	Public administration	Private sector
Chief executives*	191	208	243	389
Business administration*	148	148	180	234
Higher-educated administrators*	138	147	173	221
Lower-educated administrators+	82	105	108	121
Administrative occupations+	78	83	89	93

*Source: National Labour Centre, see Hercog at al. (1998) * Occupations requiring higher education. + Occupations not requiring higher education*

Public administration (together with higher education) is the section of the public sector most exposed to competition from the private sector for well-qualified employees. Table 2.6 shows that currently the private sector is indeed very attractive to employees in executive positions. While executives in public administration earned less than 2.5 times the national average wage, private sector chief executives earned almost 4 times the national average. On the other hand administrative employees with a low educational level earn about the same in the private and the public sector. This reflects the fact that in relative terms the public salary tariff system favours less educated employees. Other important dimensions of increasing wage inequality are educational background, gender and occupation.

However, average earnings by educational groups are not sufficient to capture the returns to education, and a more elaborate regression analysis is therefore required. Table 2.7 shows some results derived by Kertesi and Köllô (1999b). The results were calculated for a (huge) sample of non-public employees. The public sector was excluded from the analysis, because as mentioned, public sector wages are determined in a rather rigid way, independently of market forces.

Table 2.7 Pure wage gains (%) by education, gender and broad occupational groups in the non-public sector*

	1986	1989	1992	1993	1994	1995	1996
Educational background (compared to 8 grades or less)							
Vocational and apprenticeship school	12.0	12.8	13.0	13.0	12.4	10.5	12.1
Upper secondary school (general and vocational)	13.6	17.1	21.6	22.6	22.1	18.3	19.2
College, University	35.9	49.2	55.4	58.7	60.2	53.7	60.4
Gender (compared to female employees)							
Male	28.6	28.2	21.9	23.0	24.3	22.2	21.2
Occupation (compared to blue-collar workers)							
White-collar non-managerial employees	9.5	13.8	21.9	24.6	24.6	21.3	24.6
Managerial employees	54.1	74.4	74.6	70.4	82.7	74.7	83.8

Kertesi and Köllô (1999b) The wage gains are calculated from (log) wage regressions, where beside the above variables experience (quadratic specification), firm level labour productivity, firm level capital/labour ratio and dummies for firm size, industries and regions were included.*

The relative wage gain of employees with low vocational training compared to employees with 8 or less grades has not changed; it is about 12 %. On the other hand, the wage gain of upper secondary school graduates has increased from 14 % to 18-22 %, while the most significant increase is in the return on a higher education degree, rising from 36 % to 55-60 %. Thus, unskilled labour was greatly devalued during the transition process. These changes reflect the fact that the transition brought technological change in Hungary; the old industrial structure was more intensive in "raw labour". If we add that poorly educated people are those most exposed to unemployment, we may claim that this is the group that has lost most after the transition.

We see the same process if we look at occupational groups. White-collar employees gained even if they did not have managerial positions (their gains increased from 10 to 21-%). The increase in the gains of managerial employees were even higher.

Finally, it is worth looking at gender differentials. The results are rather negative: in 1996 women earned on average 21.2 % less than men, after controlling for several individual and occupational characteristics. However, the dynamics reveal rather positive processes in that this difference was close to 29 % in 1986. The transition therefore seems to have brought some reduction in the level of wage discrimination against women. At the same time the major part of this decrease in the wage gap is more the result of women with a low educational background leaving the labour force than of decreasing discrimination.

Inequality

One of the most important issues involving income distribution is the incidence of poverty. In Table 2.8 we present the evolution of poverty rates and gaps using three different relative poverty lines. The figures show a small increase in poverty between 1992 and 1997 (using half of mean income as the poverty line, the incidence of poverty among Hungarian households increased to 17.8 % from 12.8 %). However, the gap between the poor and the rest of society remained unchanged during this period.

Table 2.8 Income distribution, and poverty in Hungary, 1992-1997

	Poverty threshold				
	50% of the mean		50 % of the median		First quintile
	Poverty rate	Poverty gap	Poverty rate	Poverty gap	Poverty gap
1992	12.8	33.2	10.2	31.3	30.9
1993	10.4	26.5	6.6	27.0	25.0
1994	12.1	26.3	7.4	26.7	26.2
1995	15.8	29.0	9.0	33.4	27.9
1996	18.3	29.8	12.8	29.9	31.2
1997	17.8	31.1	12.4	32.6	30.8

Source: Szívós-Tóth (1998). Poverty rate: Percentage of people below the poverty threshold. Poverty gap: The percentage gap between the average income of the poor (defined as having income below the given poverty threshold) and the given poverty threshold.

Social Security

The budget for social security between 1989 and 1995 can be seen in Table A2. The figures show that social insurance contributions are not able to finance the sum of pensions, sickness benefits and health care expenditure, i.e., social security runs a deficit.

As in most European countries the ageing of the population represents an increasing burden for the social budget of the society. Table 2.9 presents some figures on this ageing process. The dependence ratio started to increase before the transition, but this increase has accelerated dramatically since the transition: by 1995, for every employed person we had 0.748 pensioners. The main reason, however, was not the ageing of the population, since the ratio of the old (aged 60 or more) to those of working age (aged between 20 and 59) did not change significantly (mainly because of the low life expectancy of Hungarians). Instead the causes were lower labour force participation and increasing early retirement. While in 1985, 93 % of the population of pensionable age (60 years for men, 55 for women) were pensioners, in 1995 at least 30 % of the pensioners were below the statutory age; thus, they were making use of some early retirement scheme or had retired because of poor health. The latter has also been a common way for people with poor labour market opportunities to leave the labour force.

Table 2.9 Maturation of the Hungarian pension system

	1980	1985	1990	1995
Ratio of pensioners to employed (%)	35.8	40.8	46.1	74.8
Ratio of pensioners to pension-aged population (%)	83	93	105	130
Ratio of persons aged 60+ to those aged 20-59 (%)	30.6	-	35.9	36.0
Ratio of average pension to average wage (%)	55.5	56.2	66.1	61.0
Implicit contribution rate*	19.8	22.9	30.4	43.6+

*Source: Palacios and Rocha (1998) and Csaba and Semjén (1998). * Calculated proportion of average (net) wages necessary to finance the pensions system. + 1994.*

Taxes

Table 2.10 presents the evolution of the main tax revenues and their share in GDP since the introduction of the current tax system. The most important tendency in the composition of tax revenues is a shift from corporate taxation towards personal income and value-added taxes. At the same time, the share of tax revenues in GDP was reduced to 20.6 % by 1997 from 33.9 % in 1988.

Table 2.10 Main tax revenues 1988-1997

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Billion HUF										
Total major taxes	488	529	606	643	732	903	1052	1383	1553	1649
GDP	1440	1723	2089	2498	2943	3548	4365	5500	6745	8020
Share of GDP (%)										
Major taxes	33.9	30.7	29.0	25.7	24.9	25.5	24.1	25.2	23.0	20.6
Value-added tax	8.5	7.8	7.0	6.0	6.0	8.1	7.7	7.7	7.7	7.6
Personal income tax	4.3	5.5	6.1	7.4	7.0	7.3	7.0	7.0	7.1	6.1
Consumption tax	6.1	5.5	5.2	5.5	5.7	4.2	3.8	3.8	3.5	3.5
Customs fees and duties	2.4	2.6	2.5	2.5	3.4	3.6	3.5	4.6	3.3	2.0
Corporate tax	6.1	5.4	4.5	3.1	2.2	1.6	1.7	1.7	1.2	1.2
Extraordinary payments	6.5	3.8	3.8	1.3	0.7	0.7	0.4	0.5	0.2	0.2

Source: Vámosi-Nagy et al. (1998)

From the labour market's point of view the personal income tax is the most influential type of tax. Table 2.11 shows the most important changes in the personal income tax burden between 1988 and 1997. Personal income taxation was introduced in 1988 and since then several changes have been introduced in the system. One of the most important changes was the reduction of tax brackets. In 1988 there were 11 brackets with a 60 % tax rate in the highest bracket. Now we have only 4 tax brackets, with 42 % as the highest marginal tax rate. However, the changes in the tax brackets have not followed inflation, and average taxation therefore increased from 14.43 % to 22.6 % by 1996. The other type of changes were implemented to simplify the system and eliminate allowances which may be used for tax evasion. Policy issues regarding the taxation system will be discussed in more detail in Section 8.4.

Table 2.11 Changes in the Personal Income Tax (PIT) burden (% and HUF/year)

Year	Average gross wage	Minimum wage*	Upper limit of zero % tax bracket	Highest PIT rate (%)	Lower limit of highest tax rate	Average PIT rate (%)
1988	107 616	36 000	48 000	60	800 001	14.43
1989	126 852	44 400 48 000	55 000	56	600 001	14.37
1990	161 352	57 600 67 200 69 600	55 000	50	500 001	16.11
1991	215 208	84 000	55 000	40	500 001	18.13
1992	267 528	96 000	100 000	40	500 001	17.97
1993	326 076	108 000	100 000	40	500 001	19.25
1994	407 268	126 000	110 000	44	550 001	18.06
1995	466 800	146 400	110 000	44	550 001	21.45
1996	562 044	174 000	+	48	900 001	22.59
1997	671 640	204 000	+	42	1 100 001	20.91

*Source: Vámosi-Nagy et al. (1998). * In 1989 and in 1990 the minimum wage changed during the year. + The zero tax bracket was eliminated after 1996.*

Finally, we must mention that payroll taxes altogether are very high in Hungary, producing a large gap between gross payments by the firm and the net receipts of the employees. For instance, in 1996, if an employee received 100 HUF as earnings from the firm, the employer had to transfer 47.5 HUF in payroll taxes (social security contributions and unemployment insurance contributions), while the average employee had to transfer 34.1 HUF in personal income tax (the average tax rate is 22.6%) and individual social security contributions (11.5%). Therefore, the employee received only 44.7 % (65.9 HUF) of the total wage cost to the firm (147.5 HUF). This extremely high rate of payroll taxation clearly provides an incentive to black employment and tax evasion.

2.3 *Key issues*

As in most transition countries, the Hungarian labour market is characterised by several problems and defects. Many of them arise from transition restructuring, but some of them come from various traditional features of the Hungarian labour market or from the malfunctioning of some labour market institutions. Below, we have chosen the ones that we think are most important and need solving most urgently.

- Labour force participation is extremely low in Hungary in international comparison. There are several reasons for this, one of them being the sharp employment decline due to the transition shock. Because of some particularities of the Hungarian benefit system and because early retirement schemes were easily available, job losers left the labour force to a great extent. In addition, the extremely high level of payroll taxation in Hungary discourages job creation (in the legal sector at least), which also contributes to lower labour force participation rates. Low labour force participation implies that employment rates are also low in Hungary.
- In general the high level of payroll taxation (personal income taxes and social security contributions) has many discouraging impacts on the Hungarian economy. The most important ones are a lower level of job creation and higher incentives for involvement in the black economy. However, there is pressure from the budget to keep the level of tax and social security revenues at the same level, because the ageing of the population requires increasing social expenditure.
- Partly as a consequence of high taxation Hungary has a considerable shadow economy. All the usual components of the shadow economy can be observed in Hungary, ranging from criminal activities to tax evasion and black employment. As taxation has been high since the introduction of the personal income taxation scheme in 1987, all types of tax evasion became a "natural choice" for a considerable proportion of the Hungarian population. For this reason, tax evasion is a socially acceptable activity, which makes it more difficult to enforce tax payments.
- The labour market position of the Hungarian Romany minority. During the transition process the majority of Hungarian Romanies (the size of the Romany minority is about half a million citizens, which is 5 % of the Hungarian population) left the labour market. At first they became unemployed, later they left the labour force to become inactive. As a consequence their labour force participation is very low, and they are highly dependent on different forms of social assistance (means test subsidies, family allowances). This position is mainly due to their extremely low average educational background, but there are also indications of employment discrimination against the Romany minority. Since the educational record of Romany pupils lags far behind the Hungarian average, there is little hope of improvement in the labour situation of Hungarian Romanies.
- We can also see several imbalances in the Hungarian labour market in the regional dimension. These differentials are mainly due to the restructuring of the Hungarian economy, but the geographical location and traditional sectoral composition have also contributed to these inequalities. We must add that the Hungarian Romany population is over-represented in the most backward north-eastern and south-western regions. In these regions, therefore, the position of the Romany minority is worsened by the general crisis in the region.
- Another important issue is the increasing proportion of the long-term unemployed within the pool of total unemployment. These unemployed persons have very low chances of finding a job, because Hungarian employers in general prefer job-to-job switchers. Moreover they have characteristics (low educational background, bad geographic location) that are not demanded in the labour market.

- Another important issue is the increasing wage gap between the private and the public sector (public administration, health care and education). This wage gap increased throughout the transition period, particularly after the 1995 stabilisation package. The negative consequences of this wage gap include brain drain from this sector to the private sector or abroad. At the same time, the low level of earnings in this sphere contributes to the deteriorating performance of these sectors. In addition, in the long-run the low level of earnings in this sphere may lead to social tensions.
- Another problem is that the occupational structure of the labour supply is adjusting slowly to the dynamic changes in labour demand because of the rigidity of the (vocational) education system. This is partly because in this respect, there is limited communication between the social partners (schools, employers' organisations, national institutions responsible for vocational training). Another reason is more institutional; for bureaucratic reasons and because of financial constraints, it takes a long time to introduce new areas of vocational education.
- Finally, the adaptation of the Hungarian economy and particularly the labour market to the European Community is a key issue in several respects. Since there is no tradition of regional level policy making, there is a lack of qualified staff and institutions to organise ESF-type action at the regional level. However, the existence of such staff is crucial not only for applying for European funds, but also for administering, implementing and monitoring these projects.

3. Employment in Hungary

3.1 General trends in employment

The Hungarian economy, like other socialist economies, was characterised by excessive labour demand. Labour market problems first arose in the mid-eighties as a consequence of the serious economic problems. At that time it was still possible to solve the problem by restricting the employment of pensioners.

The tax reform in 1989, especially the high VAT and the income tax on higher incomes, increased labour costs and the price of products, which reduced labour demand. The high social security contribution had the same effect. The attempts of the first non-communist government in 1990 to reduce the high deficit by raising interest rates and limiting the access to commercial credit were successful in decreasing the deficit but had a very powerful impact on labour demand, not only affecting existing firms but also deterring the establishment of new ones.

The massive appreciation of the Hungarian currency was bad for exports and thus decreased the demand for labour as well. Only large foreign companies were able to create new jobs. As a consequence of the difficult financial situation, many companies went bankrupt. Because of this many people lost their jobs. Bankruptcy directly affected 240 000 workers until 1994 and about 200 000 in 1995.

Privatisation had an ambivalent effect on labour demand. In the companies privatised in the first phase, better management and more efficient production resulted in stable or increasing labour demand. On the other hand, these companies often crowded out the less efficient companies from the market, causing a lower level of employment. In the second phase of privatisation, not even employment within firms remained unchanged, due to the reduced financial capacity of buyers (Table 3.1).

Falling employment rates

The figures in Table 3.2 show that by 1992 the employment rate had fallen to 52.8% (compared to 87% of the population aged between 15-60 in 1989), and it decreased steadily to 46.7% in 1996 and 1997. Since only a few of the people who had lost their job found a new one, unemployment increased very fast. There were already 80 000 registered unemployed in 1990 and in 1993 this number amounted to 632 000.

In 1993 unemployment reached its peak: there were more than half a million unemployed according to the ILO definition. Since then unemployment has been decreasing. But as withdrawal from the labour force did not stop until 1998, the decrease in unemployment was at first accompanied by a fall in employment. The employment rate only started to increase in 1998 (for men one year earlier), together with labour force participation.

Table 3.1 Employment in Hungary (15-74 years) 1992-1998

	Total employed* (thousands)	Yearly change in number of employed (%)	Female employed * (thousands)	Yearly change in number of female employed (%)	Female share of total employ-ment	Male employed * (thousands)	Yearly change in number of male employed (%)	Male share of total employ-ment
1992	4082.7	-	1864.5	-	45.7	2218.2	-	54.3
1993	3827.3	-6.3	1750.0	-6.1	45.7	2077.3	-6.4	54.3
1994	3751.5	-2.0	1696.5	-3.0	45.2	2055	-1.1	54.8
1995	3678.8	-1.9	1629.2	-4.0	44.3	2049.6	-0.3	55.7
1996	3648.1	-0.8	1611.0	-1.1	44.2	2037.1	-0.6	55.8
1997	3646.3	-0.1	1602.0	-0.6	43.9	2044.3	0.4	56.1
1998[1,2]	3716.3	1.9	1657.9	3.5	44.6	2040.1	-0.2	55.4

*Source: CSO LFS. * Excluding persons on child care leave and including conscripts. [1] The sample of the Labour Force Survey (LFS) has been broadened from 1998, so data are not fully compatible with the latest survey outcomes. Using the old sample we would obtain slightly higher figures (around 20 000 persons). [2] 3rd quarter 1998.*

Table 3.2 Employment rates in Hungary by age group 1992-1998, selected years (%)

	1992			1994			1996			1997			1998[1]		
age	T	W	M	T	W	M	T	W	M	T	W	M	T	W	M
15-74	52.8	46.6	59.6	48.2	41.9	55.1	46.7	39. 6	54.5	46.7	39.5	54.6	47.9	41.1	55.3
15-59	62.4	56.5	68.5	58.0	51.9	64.2	56.6	49.3	64.1	56.5	49.2	64.0	57.7	51.1	64.4
15-24	37.3	33.6	40.7	32.9	29.5	36.1	30.4	25.2	35.4	31.4	26.2	36.2	35.2	30.5	39.6
25-39	75.8	68.1	83.3	72.3	63.7	80.8	70.5	59.5	81.4	70.2	58.6	81.7	71.3	60.8	81.5
40-59	65.8	59.6	72.6	61.5	55.4	68.1	61.6	55.4	68.3	61.4	55.3	68.2	61.1	55.7	67.0
60-74	9.8	7.5	13.0	6.0	4.2	8.4	4.4	3.2	6.0	3.9	2.8	5.5	4.0	2.5	6.0

*Source: CSO LFS. * Excluding persons on child care leave and including conscripts. 1 The sample of the Labour Force Survey (LFS) has been broadened from 1998, so data are not fully compatible with the latest survey outcomes. 3rd quarter 1998.*

The female employment rate was lower even in the eighties than the male employment rate. After the transition began, women were the first to leave the labour force. There are many reasons for this. As the price of childcare (nursery schools) increased, staying at home with the children became a plausible alternative. Since women's wages were lower than men's were, this was an alternative for women rather than for men. The difference in wages can partly be explained by the difference in educational attainment and more particularly by differences in occupational composition and partly by discrimination by employers. Due to the lower labour force participation of women, both their employment rate and their unemployment rate have been lower than for men. Until 1997, female employment declined more sharply than male employment. In 1998 female employment increased more than male employment although the number of employed women above the retirement age decreased.

Educational attainment

Another aspect of the analysis is the employment of persons with different educational attainment. Unfortunately we cannot calculate employment rates for different school types since no data are published regularly on the educational attainment of the working age population. But we can follow the trend in levels. The biggest "losers" of the transition were the unskilled: persons who had failed to complete their basic schooling or had only basic general education. The number of employed persons from these two groups has decreased substantially since the first year of the changes. These people were mainly employed in agriculture and heavy industry. With the collapse of these sectors, they lost their jobs and were unable to find new ones. Also, the constant decrease in demand for unskilled labour reflects the general trend in Europe: technological change has increased the demand for skilled labour while unskilled labour is needed less and less. Another possible explanation may be that industries requiring lower qualifications move to less developed countries. This is still not a phenomenon in Hungary but in the near future we can expect these industries to move to the neighbouring less developed countries, causing even lower demand for unskilled labour in Hungary.

The number of employed persons with vocational education fell until 1993; the number of employed persons who had completed grammar or other upper secondary school decreased until 1996. Finally, the employment of people with university or college degrees stopped falling in 1995. In 1998 the employment of all groups but the one with uncompleted basic schooling increased. The employment of persons with higher educational attainment increased more than that of people with lower qualifications. This fact reflects the recovery of the Hungarian economy. The higher growth in the employment of more skilled persons reflects the Europe-wide trend of increasing demand for people with high educational attainment.

3.2 Structural changes in employment

In the previous decade the structure of the Hungarian economy was very old fashioned. There was a high share of agriculture and the service sector was relatively unimportant. These proportions were the consequences of government policy, not of economic rationality. Also, the industrial structure was biased towards branches (heavy industries) which were ill suited to the natural resources of the country. After the collapse of the COMECON trade, the economic structure was no longer sustainable. As a result of increasing competition, the Hungarian economy underwent a very important structural change (Table 3.3).

Agriculture

Looking at the contribution of the three major sectors to the Hungarian economy, one notices the decreasing importance of agriculture. In the mid-eighties the share of agriculture in the value added was 20%, while in 1997 it was 6%. Similarly, in 1985, 21.1% of those employed worked in agriculture, while in 1998 (3rd quarter) the figure was 7.7%. (We should bear in mind that under the communist regime, prices were biased in favour of "material production", which included agriculture. So the fall in the contribution of agriculture to value added is partly due to the adjusted prices after the changes.)

Table 3.3 Employment rates by major sector in Hungary 1992-1998 (%)

	Agriculture			Industry			Services			Non-employment		
	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male
1992	6.0	3.6	8.5	18.5	13.3	24.1	28.3	29.7	27.0	47.2	53.4	40.4
1993	4.5	2.6	6.6	16.1	11.6	22.1	28.7	29.3	26.9	50.7	56.5	44.4
1994	4.2	2.3	6.3	15.9	10.8	21.5	28.1	28.8	27.3	51.8	58.1	44.9
1995	3.8	1.9	5.9	15.3	9.9	21.2	27.9	28.2	27.6	53.0	60.0	45.3
1996	3.9	1.8	6.1	15.2	9.9	21.0	27.6	27.8	27.4	53.3	60.4	45.5
1997	3.7	1.8	5.8	15.5	9.9	21.6	27.6	27.8	27.3	53.3	60.5	45.4
1998[1]	3.7	1.8	5.8	16.2	10.4	22.6	27.9	28.9	26.9	52.1	58.9	44.7

*Source: CSO LFS. * Excluding persons on child care leave and including conscripts. [1] The sample of the Labour Force Survey (LFS) has been broadened from 1998, so data are not fully compatible with the latest survey outcomes. 3rd quarter 1998.*

Problems in agriculture started already during the 1980s: many of the co-operatives and state farms were maintained by direct or indirect subsidies. After 1990 the situation deteriorated. Since agriculture was a very important export sector before the changes, it was the most seriously affected of all. The liberalisation of prices, cuts in agricultural subsidies, the restitution of land and the privatisation of state farms all deepened the crisis of the sector. Together with the very low demand in the domestic market, the loss of the Eastern markets and the continuing protectionism of the Western countries, this forced many producers to cut production. This resulted in lower employment in the sector (Tables 3.3 and 3.4).

Under the centralised regime, co-operatives employed whole villages (practically everyone in the region). Thus, excessive labour hoarding was present. After privatisation and the transformation of co-operatives into small private farms many people lost their jobs. After 1989, 400 000 agricultural jobs were eliminated.

Industry

As far as industry is concerned the transition period can be divided into two phases. Until 1992 industrial production was declining. Since then it has been recovering, although only in 1998 did it again reach its 1987 peak level. Its contribution to GDP has decreased from 45% in the mid-eighties to around 33% now. Similarly, the proportion of people employed in industry has decreased from 40 to 34% (Tables 3.3 and 3.4).

The crisis affected the north-eastern and the south-western regions most, where the heavy industries were located.

Since 1993 industrial production has been growing. The start of industrial production growth was also stimulated by the fact that the newly arrived multinational companies (GM-Opel, Suzuki, etc.) opened their factories during these years. This also explains the regional inequalities in job creation, since these factories are mainly located around Budapest and in the north-west.

Table 3.4 Structural changes in employment 1992-1998 (%)

	Employment share of agriculture*	Female employment share in agriculture*	Employment share of industry*	Female employment share in industry*	Employment share of services*	Female employment share in services*
1992	11.3	31.2	35.1	37.3	53.6	54.2
1993	9.1	29.6	32.7	36.0	58.2	54.0
1994	8.7	28.4	33.0	35.2	58.3	53.4
1995	8.0	25.9	32.6	33.7	59.4	52.6
1996	8.3	24.0	32.6	34.0	59.1	52.6
1997	7.9	25.0	33.1	33.1	59	52.6
1998[1]	7.8	24.7	33.9	33.3	58.3	53.8

*Source: CSO LFS. * Excluding persons on child care leave and including conscripts. [1] The sample of the Labour Force Survey (LFS) has been broadened from 1998, so data are not fully compatible with the latest survey outcomes. 3rd quarter 1998.*

Services

The service sector developed very rapidly after the adoption of the Enterprise Act in 1988. After the change in the political system the old state-owned trade companies, hotels and catering firms were reorganised, split and in many cases privatised, partly or fully. The low cost of entry made it possible for many people who had lost their jobs in other sectors to establish new businesses in the service sector (Tables 3.3 and 3.4).

Within the rapidly growing service sector, some branches, such as trade, catering, hotels and transport, were declining until 1995, but this decline was more than offset by the growth of banking and insurance, business services, public administration, education and personal services. Of course, one should not forget about the informal sector. It is estimated that both hotels and restaurants grew rather than declined, if informal activities are included (Árvay and Vértes, 1994).

3.3 Employment in the private sector

The economic policy of the first post-communist government in 1990 had three main goals: privatisation, further liberalisation and at the same time stabilisation. The privatisation was supposed to be relatively quick and to be based on the sale of state-owned companies on market terms. Privatisation has consisted of three phases: sales of state companies to foreign strategic investors (1991-1992), sales of state companies to domestic investors (1992-1994), and sales of public utility and telecommunications companies to foreign firms (1994 on).

In the first phase, mostly prosperous enterprises were sold to foreign investors, often to multinationals that wanted to establish themselves in the Hungarian market or wanted to create strategic positions for entering the East European market. The foreign buyers were often attracted by the low labour costs. In the second phase, smaller state-owned companies were sold to Hungarian investors. The government also supported workers' share ownership by preferential loans. In the third phase, the public utility companies (often state monopolies) were sold to large foreign firms.

At the beginning of 1990 there were 1860 state-owned enterprises. In August 1998 there were 228 companies in state ownership. The book value of the business property of the State Property Holding Company is 601 billion Hungarian Forints (approximately 2.74 billion USD). Almost half of this value (277.5 HUF) is still to be sold.

We define the private sector as everything except education, health care and public administration, regardless of (not very reliable) ownership data. However, there are problems in defining the private sector in this way: we neglect private education and health services while counting the postal services, public news agency and broadcasting. Also, at the beginning of our time series, almost all private firms, using this definition, were public in terms of ownership.

Using this definition of the private sector, we can conclude that employment after the political changes declined in the private sector[1] (between 1987 and 1992 the number of people employed decreased by 22%, by the third quarter of 1998 it had decreased further to 69% of the number in 1987), while in the public sector it was more or less stable. The explanation is that the private sector suffered the most severe consequences of the political changes: these were the enterprises that were privatised, faced the competition of the European market and in many cases went bankrupt (Table 3.5).

The public sector employs more women than men. Although the share of male employment in public administration and defence is higher, the number of women employed in education and health services outweighs this fact.

3.4 *Regional distribution of employment*

In Hungary there are nineteen counties plus the capital, Budapest. For the purposes of this study it is better to talk about regions rather than counties, organising counties with similar characteristics into the same groups. We will use the following division of the country, which follows the structure of the newly reformed regional administration.

R1: Central Hungary: Budapest and Pest county.

R2: Central Transdanubia: Fejér, Komárom-Esztergom and Veszprém counties.

R3: Western Transdanubia: Gyõr-Sopron-Moson, Vas and Zala counties.

R4: Southern Transdanubia: Baranya, Somogy and Tolna counties.

R5: Northern Hungary: Borsod-Abaúj-Zemplén, Heves and Nógrád counties.

R6: Northern Great Plain (central part of East-Hungary): Hajdú-Bihar, Szabolcs-Szatmár-Bereg and Jász-Nagykun-Szolnok counties.

R7: Southern Great Plain (southern part of East-Hungary): Bács-Kiskun, Békés and Csongrád counties.

1 Of course if we define the private sector as privately owned firms, employment in this sector grew continuously after 1990: almost all state-owned firms in the competitive sphere were privatised, so their workers became employed in the private sector.

Table 3.5 Employment in the public and non-public sectors 1992-1998 (thousands)

	Number of employed* inthe public + sector	Yearly change in number of employed* in the public + sector (%)	Number of employed* in the non-public sector	Yearly change in number of employed* in the non-public sector (%)	Total
1992	841.8	-	3240.9	-	4082.7
1993	883.9	5.0	2943.4	-9.2	3827.3
1994	897.8	1.6	2853.7	-3.0	3751.5
1995	884.9	-1.4	2793.9	-2.1	3678.8
1996	851.8	-3.7	2796.3	0.1	3648.1
1997	822.8	-3.4	2823.5	1.0	3646.3
1998 [1,2]	844.1	2.6	2872.2	1.7	3716.3

*Source: CSO LFS. * Excluding persons on child care leave. + Education, healthcare and public administration. [1] The sample of the Labour Force Survey (LFS) has been broadened from 1998, so data are not fully compatible with the latest survey outcomes. [2] 3rd quarter 1998.*

Table 3.6 Employment rates by region 1992-1998 (%)

Region	1992	1993	1994	1995	1996	1997	1998 [1,2]
R1: Central Hungary	56.7	52.9	51.7	51.2	50.7	50.6	51.3
R2: Central Transdanubia	53.2	50.5	49.5	48.1	47.6	48.2	50.3
R3: Western Transdanubia	56.0	54.3	53.5	52.0	52.6	53.0	54.3
R4: Southern Transdanubia	52.1	47.8	47.1	43.6	44.7	44.3	46.1
R5: Northern Hungary	47.4	44.5	32.5	41.3	40.6	40.5	40.1
R6: Northern Great Plain	48.1	44.1	43.1	41.8	41.0	40.5	41.6
R7: Southern Great Plain	52.6	48.1	47.2	47.0	46.6	47.4	48.1
Total	52.8	49.3	46.9	47.0	46.7	46.7	47.8

Source: CSO LFS. [1] The sample of the Labour Force Survey (LFS) has been broadened from 1998, so data are not fully compatible with the latest survey outcomes. [2] 3rd quarter 1998.

There are important differences between regions in terms of employment (Tables 3.6 and 3.7). The difference between the highest and lowest employment rates is more than 14 percentage points. This difference is due to several factors. First, the regions with lower employment rates were affected more severely by the transition shock. The companies here could not stand the increasing competition. At the same time, the new companies formed by multinational organisations were set up mainly in the western and central regions. They chose these regions because of the shorter distance to the western border and the better infrastructure. Also, the average educational

attainment is higher here than in the eastern regions. Thus, the labour supply meets the demand for highly qualified employees generated by the rapidly growing economy.

The newly established companies are the engine of the fast growth in industrial production in the already better developed regions. The faster growth of industrial production (37.2% in the most developed Western-Transdanubian region and 5.4 % in the counties of Northern Hungary) makes the regional imbalances even more serious.

Table 3.7 Employment shares by region 1992-1998 (%)

Region	1992	1993	1994	1995	1996	1997	1998 [1,2]
R1: Central Hungary	31.3	31.6	32.2	31.9	31.2	30.9	30.7
R2: Central Transdanubia	10.8	11.0	11.4	11.1	11.2	11.3	11.7
R3: Western Transdanubia	10.3	10.7	11.1	10.8	11.1	11.1	11.2
R4: Southern Transdanubia	9.7	9.5	9.9	9.1	9.4	9.3	9.4
R5: Northern Hungary	11.3	11.3	8.6	10.9	10.9	10.9	10.7
R6: Northern Great Plain	13.3	13.0	13.3	12.9	13.0	12.8	12.9
R7: Southern Great Plain	13.3	13.0	13.4	13.3	13.3	13.6	13.4
Total	100	100	100	100	100	100	100

Source: CSO LFS. [1] The sample of the Labour Force Survey (LFS) has been broadened from 1998, so data are not fully compatible with the latest survey outcomes. [2] 3rd quarter 1998.

The high employment rate of the well-developed western part of Hungary can also be partly explained by the many workers who are employed in Austria. The counties of Northern Hungary were the former heavy industry region (Table 3.8). With the collapse of heavy industries these counties were severely affected and they have not yet managed to recover. This is reflected in the low employment rate. Also, the majority of the Hungarian Romany population lives here. Their educational attainment is lower than the Hungarian average.

The Northern Great Plain's monocultural rural economy was affected in the same way: it lost the market for its products and employment fell dramatically.

The population of the most affected regions is generally less well educated. This also limits the chances of re-employment. Comparing the regions by employment status, we can conclude that in the agricultural regions (R6 and R7) the share of wage employees is lower than in other regions and the share of self-employment is higher than the average.

Table 3.8 Employment shares by sectors in regions 1998, 3rd quarter (%)

Region	Agriculture	Industry	Services
R1: Central Hungary	2.3	28.1	69.6
R2: Central Transdanubia	7.2	42.5	50.3
R3: Western Transdanubia	8.0	43.1	48.9
R4: Southern Transdanubia	10.6	34.7	54.7
R5: Northern Hungary	6.0	39.1	54.9
R6: Northern Great Plain	10.9	31.5	57.6
R7: Southern Great Plain	17.4	31.3	51.3
Total	7.8	34.1	58.1

Source: CSO LFS

3.5 *Hidden employment*

Hidden employment is important in the service and agricultural sectors in Hungary. Estimates for 1992 suggest that informal labour was equivalent to 200 000-400 000 full-time workers. Since the informal sector consists of relatively labour-intensive activities, the first figure may be too low if we accept the estimate that the share of the informal sector is as high as 26-31% of the official GDP (Árvay and Vértes, 1994; Laczkó 1998). The estimates of the share of the hidden economy in GDP are based on electricity consumption. This estimated proportion is similar to the estimated share of the shadow economy in Poland and higher than in Slovakia and the Czech Republic, using the same methodology for estimation.

The studies mentioned above found a high correlation between unemployment and the share of the hidden economy. Also, there is a high correlation between the share of self-employment and the shadow economy. This can mean three things: first, that a proportion of the unemployed people are not really unemployed, they work in the hidden economy. Second, job losses in the "official sphere" force people to look for employment in the informal sector. Third, since the share of self-employment is growing, we can expect the same thing to happen to the hidden economy.

In Hungary there is a big difference between the number of registered unemployed and LFS unemployed. The persons who are registered but not unemployed according to the ILO standards are either employed without being registered or are without a job but are not looking for another one. The share of the employed people of the registered unemployed is estimated to be 12%. Since they are prohibited to have a job in the legal economy, they are partly employed in the shadow economy.

It is always the goal of the current government to reduce the shadow economy, but so far this has only been achieved to a limited extent. Seasonal workers (both Hungarian and foreigners, mainly Romanian citizens) used to work without paying taxes and social security contributions. Moreover, the foreigners did not have work permits. Since 1997 it has been obligatory for every seasonal worker to have a small booklet in which his or her employer has to stick a stamp for each day of employment. The stamp can be purchased at the post office and is equivalent to one day's employer contribution to social security. Frequent inspection reinforces this policy and prevents the black employment of foreigners.

To reduce the importance of informal employment in the service sector, a further reduction of the employer's contribution to social security is needed.

3.6 *Vacancies and structural imbalances*

One of the most important indicators of the prosperity of an economy is the number of new vacancies posted. As in most European countries, employers have to report all the new vacancies they post to the regional labour centres. This implies that in principle the National Labour Centre's register of vacancies contains all the job offers with their regional and occupational distribution.However, this is a regulation that is difficult to enforce, so employers only report some of their vacancies, typically the ones that require employees with low vocational qualifications or without specific skills. In their case a previous work record is not of great importance. When they are looking for better qualified applicants they use other sources (personal channels, newspaper advertisements, headhunting agencies). Furthermore, there are differences between regions with respect to the extent to which employers report their new vacancies. [2]

*Table 3.9 Unemployment (ILO) and vacancies by region 1998 **

Region	Number of vacancies, *V*	Number of unemployed, *U*	Unemployment rate (%)	*U/V* ratio*
R1: Central Hungary	16 705	67 300	5.6	4.1
R2: Central Transdanubia	8 529	30 500	6.6	5.0
R3: Western Transdanubia	4 149	26 000	6.1	8.2
R4: Southern Transdanubia	3 281	34 000	8.9	19.8
R5: Northern Hungary	8 612	54 100	12.0	10.7
R6: Northern Great Plain	7 170	56 000	10.5	9.7
R7: Southern Great Plain	6 328	34 200	6.5	8.5
Total	54 774	302 000	7.6	7.7

*Source: National Labour Centre. Number of vacancies: [1] November 1998; number of unemployed: Q3 of 1998. See also tables A25 and A26. * Number of unemployed divided by number of vacancies.*

The increasing number of vacancies (Table 3.9) shows the increasing demand for labour. At the beginning of November 1998 the number of vacancies in the country was 54 774, 1 552 more than one year earlier. There were 30 559 new vacancies, 1 552 more than in November 1997. Of these new vacancies, 20 807 were normal (non-subsidised) vacancies, 5 209 were public works vacancies, 1 893 were wage-subsidised vacancies and 2 650 were other subsidised vacancies. The time pattern of the vacancies shows that employers use the labour centres to a lesser extent when looking for white-collar employees and to a greater extent when looking for persons with vocational qualifications (Table 3.10).

2 Because of these data problems, the following analysis should be treated with caution, since the data may be biased towards blue-collar vacancies. Unfortunately, we do not have any other data source on vacancies, so we are unable to assesss the size of this bias.

The number of reported cuts in personnel is growing but the number of jobs terminating is less than in the previous month. There were 85 reports with altogether 2 981 terminating jobs in November 1998. One month earlier there were 67 reports with the loss of 4 067 jobs. In November 1997 the number of jobs lost was 5 478, one year earlier, around 13 800.

Table 3.10 Structural imbalances by regions, July 1998. Regional U/V (unemployed/vacancies) ratio.

Region	Skilled	Semi-skilled	Unskilled	Total blue-collar	White-collar	Total
R1: Central Hungary	2.4	4.4	4.6	3.3	13.2	4.1
R2: Central Transdanubia	3.6	3.8	12.6	4.3	11.2	5.0
R3: Western Transdanubia	7.9	5.0	12.8	7.0	21.3	8.2
R4: Southern Transdanubia	26.6	13.1	21.1	19.5	21.6	19.8
R5: Northern Hungary	11.6	7.0	11.3	9.9	20.4	10.7
R6: Northern Great Plain	11.4	6.7	9.3	9.0	16.7	9.7
R7: Southern Great Plain	8.7	5.5	11.4	7.8	13.5	8.5
Total	6.7	5.7	10.0	6.9	15.5	7.7

Source: National Labour Centre. Tables A25 and A26.

4. Labour Force Participation

4.1 *Demographic trends*

The Hungarian population is slowly decreasing (Table 4.1). Although it is still above ten million, forecasts suggest that in two or three years, the population of Hungary will be less than ten million. The natural increase in the first half of 1998 was -3.9 per thousand inhabitants (with 9.8 live births and 12.8 deaths per thousand). The birth rate has been decreasing over the last 20 years, while the mortality rate has been almost unchanged. Average life expectancy at birth was 66.35 for males and 75.08 for females in 1997. As a consequence of the low birth rate, the population is ageing. The density of the population is 109 inhabitants per sq. km. The urbanization rate is 63%.

Table 4.1 Total population 1990-1999 (1 January)

Year	Total (thousands)	Yearly change in total population (%)	Male (thousands)	Yearly change in male population (%)	Female (thousands)	Yearly change in female population (%)
1990	10 375	-	4 984.9	-	5 389.9	-
1991	10 355	-0.2	4 972.2	-0.3	5 382.7	-0.1
1992	10 337	-0.2	4 960.5	-0.2	5 376.7	-0.1
1993	10 310	-0.3	4 943.4	-0.3	5 366.8	-0.2
1994	10 277	-0.3	4 922.9	-0.4	5 354.0	-0.2
1995	10 246	-0.3	4 903.7	-0.4	5 342.0	-0.2
1996	10 212	-0.3	4 883.9	-0.4	5 328.4	-0.3
1997	10 174	-0.4	4 863.3	-0.4	5 311.2	-0.3
1998	10 135	-0.4	4 841.9	-0.4	5 293.5	-0.3
1999 *	10 092	-0.4	4 818	-0.5	5 274	-0.4

*Source: CSO. * Preliminary data.*

The population of working age (15-74) was increasing until 1995. Since then the working age population has been slowly decreasing.

The population of Hungary is not mobile. Data from the Population Register show that people do not easily give up their place of residence. Naturally this is a disadvantage when solving labour market problems. In the region most affected by labour market problems, the migration of the population to other parts of the country is slightly higher than elsewhere in the country (Table 4.3) .

Table 4.2 Population of working age 15-74, 1990-1998 (1 January)

Year	Total population (thousands)	Yearly change in total population (%)	Male population (thousands)	Yearly change in male population (%)	Female population (thousands)	Yearly change in female population (%)
1990*	6 284.5	-	3 107.3	-	3 177.2	-
1991*	6 317.6	0.5	3 125.5	0.6	3 192.1	0.5
1992	7 728.9	-	3 723.8	-	4 005.1	-
1993	7 763.3	0.4	3 737.1	0.4	4 026.2	0.5
1994	7 779.6	0.2	3 731.7	-0.1	4 047.9	0.5
1995	7 819.7	0.5	3 747.0	0.4	4 072.7	0.6
1996	7 808.0	-0.1	3 733.0	-0.4	4 075.0	0.1
1997	7 800.0	-0.1	3 740.3	0.2	4 059.7	-0.4
1998 [1]	7 753.9	-0.6	3 719.5	-0.6	4 034.4	-0.6

*Source: CSO. * 15-60. [1] 3rd quarter of 1998.*

Table 4.3 Migration of the population

Region	Number of inhabitants [1]	Migration per thousand inhabitants [2]
R1: Central Hungary	2 855 000	1,1
R2: Central Transdanubia	1 111 000	1,4
R3: Western Transdanubia	988 000	1,2
R4: Southern Transdanubia	980 000	-0,7
R5: Northern Hungary	1 277 000	-2,2
R6: Northern Great Plain	1 531 000	-1,3
R7: Southern Great Plain	1 350 000	-0,3
Total	10 092 000	0

Source: CSO. [1] Data from January 1999. [2] Data from 1998.

4.2 Labour force participation of the population

While the population of working age has been virtually unchanged, the potential supply of labour has been declining in the last ten years. The number of people actually available for work has been influenced by many factors: compulsory school attendance was extended from age 14 to age 16, a growing number of students are continuing their education in upper secondary schools or universities, and many people (mainly women) choose to take child-care leave (often as an alternative to unemployment). Also, the number of working pensioners has been declining. Many elderly people choose early retirement because of health problems or because they cannot find jobs. Over 600 000 people who are under the retirement age and another 320 000 persons of retirement age left the labour force in the first half of the 1990s.

Only part of this can be attributed to the change in compulsory school attendance; the major cause seems to be the unsatisfactory labour market situation.

The age of retirement was 55 for women and 60 for men in the previous decade. After the changes it was changed to 62 for both genders. A gradual adjustment has been implemented since 1997. Thus men will reach the new retirement by 2001, while women only by 2009.

In the second half of this decade the decline in labour force participation slowed down, and in 1998 it started to increase. The present labour force participation rate (3rd quarter 1998) is 51.8%; male participation is 60.3%, while female participation is 44% (15-74 years of age). If we use an active age of 15-64, the activity rate is 58.4%, which is well below the EU average. The female activity rate is 50.7%, the male activity rate is 66.5%, using the 15-64 age group (Table 4.4).

Table 4.4 Labour force participation rate of the working age (15-74) population by age group 1992-1998, selected years (%)

	1992			1994			1996			1997			1998[1]		
Age	T	W	M	T	W	M	T	W	M	T	W	M	T	W	M
15-64													58.4	50.7	66.6
15-74	58.6	51.0	66.7	54.0	46.3	62.4	51.8	43.4	61.1	51.2	42.8	60.3	51.8	44.0	60.3
15-59	69. 4	62.0	76.9	64.9	57.2	72.8	62.8	54.1	71.8	62.0	53.3	70.8	62.4	54.7	70.2
15-24	45.2	39.6	50.5	40.8	35.3	46.0	37.1	30.2	43.7	37.3	30.7	43.6	40.6	34.6	46.3
25-39	84.1	75.0	93.2	80.7	70.5	90.8	78.1	65.4	90.8	76.8	63.7	89.7	77.0	65.3	88.4
40-59	70.9	63.7	78.9	66.7	59.2	74.9	66.6	59.3	74. 5	65.8	58.6	73.6	64.7	58.5	71.4
60-74	10.3	7.9	13.5	6.7	5.0	9.0	4.6	3.5	6.2	4.2	3.0	5.8	4.4	2.8	6.6

*Source: CSO LFS. * Excluding persons on child care leave and including conscripts. [1] The sample of the Labour Force Survey (LFS) has been broadened from 1998, so data are not fully compatible with the latest survey outcomes. 3rd quarter 1998.*

The labour force participation of the 15-19 age group has declined drastically: from 23% in 1992 to 15.6% now. This can be explained by the rise in the compulsory school attendance age and the greater willingness and better opportunities for continuing education at upper secondary and higher levels. The other age group which participates in the labour force on a much lower scale is the group of pensioners (60-74 years old): while in 1992, 10.3% were on the labour market, now only around 4.4% are in the labour force.

In the last two years the structure of the inactive group has changed. The number of those who can (re)enter the labour force easily (e.g. the people who want to work but are not looking for a job) fell. The number of those who do not want to work increased by 3% in 1997. This can partly be explained by the rise in the number of pensioners (mainly due to early retirement), but it seems more likely that these people left the labour force by their own decision.

4.3 *Labour force participation by educational attainment*

Since the Central Statistical Office of Hungary does not publish data regularly on the educational attainment of the population, we can only present a picture for the second quarter of 1997. For more detailed statistics by gender, we have to go back further in time to the data of the 1996 Microcensus. But this is not a serious problem, since these data do not change as rapidly over time as some labour statistics, for example.

In 1997, 45.6% of the working age population (aged 15-74) had only basic compulsory education or less. The same proportion, 45.2%, had completed upper secondary school (this can be general, vocational or apprenticeship school). Only 9.2% had post-secondary education. Of course, in general younger generations have higher average educational attainment than the elderly. Only 21.8% of the 25-39 year-old age group stopped their schooling at the compulsory level, while 65.7% of them completed upper secondary school and 12.5% post-secondary education.

The average educational attainment is higher for men than for women. Although their post-secondary rates are almost the same, more women lack a completed upper secondary education. The tendency these days is for women to study longer than men and attain a higher average educational level, but the older age groups (where this phenomenon is reversed) offset this.

Table 4.5 Educational attainment of the working age population, 1997, second quarter (thousands)

	15-24	25-39	40-59	60-74	Total
ISCED 0-2	836.7	432.2	1104.3	1164.6	3537.8
ISCED 3	725.8	1301.5	1295.1	192.0	3514.4
ISCED 5-7	19.5	247.6	351.3	94.9	713.3
Total	1582.0	1981.3	2750.7	1451.5	7765.5

Source: CSO LFS.

Presently women participate in post-secondary education more than men do. At the upper secondary level, women more often choose general education while men prefer vocational education.

4.4 Regional and ethnic characteristics

The labour force supply is very different in different regions: in the prosperous Western-Transdanubian region almost 58% of the population aged 15-74 years participates in the labour force (Table 4.6). In Northern Hungary this proportion is 46.5%. This also shows that in the less favourable parts of the country many people have "given up" labour force participation.

*Table 4.6 Labour force participation by region, 1998**

Region	Number of economically active persons (thousands)	Activity rate (%)
R1: Central Hungary	1 202.4	54.3
R2: Central Transdanubia	461.1	53.8
R3: Western Transdanubia	439.6	57.8
R4: Southern Transdanubia	381.3	50.6
R5: Northern Hungary	518.9	46.5
R6: Northern Great Plain	534.0	46.6
R7: Southern Great Plain	528.3	54.0
Total	3 996.1	51.8

*Source: CSO LFS. * Q3 of 1998.*

The lower participation rate of the northern regions can only partly be explained by the collapse of industry in these regions. The other factor is that the major part of Hungary's Romany minority lives here. Romany women traditionally do not work. They have more children than the Hungarian average and they dedicate their time to them. Thus the Romany activity rate has always been low.

Romany workers were the first to lose their jobs when economic problems emerged. Their probability of re-employment is much lower than the average. This can be attributed only to a minor extent to discrimination; the reason is rather their low educational attainment. Also, they live in regions with less opportunities and were mostly employed in agriculture and heavy industries which were hit by the recession. Thus, the regional-ethnic problems form a "vicious circle": regions are worse off because of the Romany minority and the Romanies are in a worse situation than the average Hungarian partly because of their distribution in the country. Since the chances of employment are very low, many Romany men also leave the labour force. In consequence, in many cases the only income the families have is the child care benefit.

4.5 *Supply of hours*

The official number of working hours for the whole economy is 40 hours a week.

Part time employment is not very popular. Neither employers nor employees prefer this kind of employment. For employers it means the same administrative responsibility as a full-time worker with fewer advantages. Moreover, for employers there is a minimum sum for health care contributions, which is to be paid independently of the type of employment. Also, this type of employment means less working time when calculating retirement benefits. The difference in retirement benefits for different total working times is substantial. Thus, it is often not worth working part time.

During the eighties no less than two-thirds of Hungarian households had a supplementary source of income derived from multiple jobs, mostly in the agricultural and service sector. In the nineties this figure declined: for many people, the former second job became the main source of income. It is very difficult to trace exactly how many people have multiple jobs, since the second jobs are often in the informal sector.

5. Unemployment

5.1 *Unemployment data*

The labour centres have registered the number of unemployed since 1990 (Table 5.1). In 1990 there were already 80 000 registered unemployed. The number of registered unemployed was highest in February 1993. There were then 705 000 registered unemployed, which is equivalent to 13.6% of the labour force. Since then the figure has decreased, to 8.8% in November 1998. The latter figure was 1.4 percentage points less than one year earlier (Table 5.1).

Alongside the decline in unemployment, the share of new job market entrants within the unemployed has increased. This shows that the ability to keep a job has increased.

ILO unemployment has always been slightly lower. Interestingly, there is only a partial overlap between these data (Table 5.2). In 1995 only 54% of the registered unemployed were unemployed according to the ILO definitions (12% were working and 34% were inactive). On the other hand, only 68% of ILO unemployed were registered unemployed. The difference between registered and ILO unemployment may also be a sign of the generous unemployment insurance system. Since 1993 the unemployment benefit has become more restrictive. In addition, the duration of the benefit has decreased from two years to one year.

Table 5.1 Data on registered unemployment, November 1998

Number of registered unemployed	392 429
Unemployment rate %:	8.8%
of which:	
New job market entrants	29 442
Younger than 26	83 008
Male	210 117
Female	182 312
Blue-collar worker	321 661
White-collar worker	70 768
Unskilled	189 842
With college degree	10 358
Number entering the register	63 069
Number entering the register for the first time	12 207
Registered for more than one year	108 002
Average time registered, days:	288 days

Source: National Labour Centre

Table 5.2 Unemployment in Hungary 1990-1998

Year	Number of ILO unemployed [1] (thousands)	Number of registered unemployed [2] (thousands)	Unemployment rate (ILO) (%)	Unemployment rate (registered) (%)
1990	-	79.5	-	1.4
1991	-	406.1	-	7.4
1992	437.7	663.0	9.8	12.3
1993	518.1	632.1	11.9	12.1
1994	448.5	519.6	10.7	10.4
1995	410.6	495.9	10.2	10.4
1996	399.3	477.5	9.9	10.5
1997	367.5	464.0	8.7	10.4
1998 *	313.0	392.4 +	7.8	8.8 +

*Source: [1] CSO LFS, [2] National Labour Centre. * The sample of the Labour Force Survey (LFS) has been broadened from 1998, so data are not fully compatible with the latest survey outcomes. + November 1998.*

ILO unemployment has been measured since 1992, the first year of the Hungarian Labour Force Survey (LFS). In 1992 the unemployment rate according to the LFS was 9.8%. It reached its peak level, 12.5%, in the first quarter of 1993. Since then it has been decreasing. In the third quarter of 1998 it was 7.5%.

The principal groups hit by unemployment were people with low educational levels, young people, disabled people and Romany population. They still have a high share within the unemployed.

5.2 General trends in total unemployment

Duration

The average length of job search of those unemployed between 1992 and 1998 more than doubled. In 1992 unemployed persons spent 8 months seeking a job on average. In the third quarter of 1998 the average duration was 17.4 months. 1998 was the first year when the average length decreased; in 1997 it was 17.7 months. When we look at the increase in the average duration we should remember that in 1992 people had been looking for a job for a period of at most 2 years, while already in 1998, 22% had been looking for a job for more than two years.

According to the labour force survey, with the exception of 1992, the share of newly unemployed (looking for a job for less than a month) has always been below 10%. The high level of unemployment could be explained by the fast increase in the duration. The chances of getting a new job have been very slight.

In 1992 the chances of re-employment (18%) and the chances of becoming inactive (12%) were both higher than in the following years.

From 1994 on, the long-term unemployed (more than one year) made up more than 40% of the unemployed. Since the end of 1996 this share has been slowly decreasing.

Table 5.3 Unemployed persons by length of job search, % of total unemployed

Year	0-6 months	7-12 months	12+ months
1992	53.5	28.0	18.5
1993	40.4	27.4	32.2
1994	35.4	23.4	41.2
1995	32.2	22.1	45.7
1996	29.7	20.5	49.8
1997	32.2	21.3	46.5
1998 *	32.2	23.1	44.7

*Source: CSO LFS * Q3 1998.*

In 1997, 13% of the long-term unemployed had never had a job. 77% of those who had worked before became unemployed because they had lost their jobs, 9.5 % had resigned, and the rest had had a business which had broken down. In 1997 only 11% of the unemployed without a job for at least 12 months received unemployment benefit. 40% received income support. The rest (80 000 people) did not have any kind of income.

Frictional and structural unemployment

The high share of long-term unemployment is one sign of structural unemployment. The long-term unemployed had usually been employees of the sectors and branches that collapsed after 1990 (iron and steel industry, agriculture). Their geographical location (in the less developed and slowest developing regions) makes re-employment difficult. Their age and educational attainment make training very difficult. They are geographically immobile, as well.

Frictional unemployment is decreasing; the number of those who are re-employed within a month has doubled.

Fluctuations are very high and growing. In a single year there are 700 000 registrations in the Labour Centres and more or less the same number stop being registered. There are people who are registered more than once within one year.

5.3 *Unemployment by age group and gender*

In Hungary the female unemployment rate is lower than the male unemployment rate (Table 5.3). The relatively favourable position of women may be connected with the structural changes: agriculture and heavy industries mainly employed men. The female-dominated light industry suffered less and women are also over-represented in the growing branches of the service sector, education and banking. A comparative study on management attitudes in Hungary, the Czech Republic, Slovakia and Bulgaria showed that discriminatory behaviour against women when hiring in Hungary is weaker than in the other three countries (Paukert, 1994).

Also, as we have already mentioned, the employment of women in the public sector is higher than that of men. During the transition, the public sector proved to be a "safe" place: employment in the

business sphere fluctuated much more than in the public sector. Another factor explaining the lower female unemployment level is that women leave the labour force more easily than men. Child care is an alternative to jobs in Hungary, especially since the costs of public child care (nursery schools) have risen.

Table 5.4 Unemployment rate by age group and gender 1992-1998, selected years (%)

	1992			1994			1996			1997			1998*		
Age	T	W	M	T	W	M	T	W	M	T	W	M	T	W	M
15-74	9.8	8.7	10.7	10.7	9.4	11.8	9.9	8.8	10. 7	8.7	7.8	9.5	7.5	6.7	8.2
15-59	10.0	8.9	10.9	10.7	9.3	11.9	10.0	8.9	10.8	8.8	7.8	9.6	7.5	6.6	8.2
15-24	17.5	15.1	19.3	19.4	16.6	21.5	18.0	16.4	19.0	15.9	14.5	16.9	13.3	11.6	14.5
25-39	9.9	9.1	10.6	10.5	9.7	11.0	9.8	9.1	10.3	8.5	7.9	9.0	7.4	6.9	7.8
40-59	7.3	6.5	8.0	7.8	6.4	9.0	7.5	6.6	8.3	6.6	5.7	7.4	5.5	4.9	6.1
60-74	4.3	4.9	4.0	10.5	14.9	7.1	5.4	7.9	3.4	6.2	7.7	5.1	9.3	10.3	8.6

*Source: CSO LFS. * 3rd quarter 1998.*

Unemployment incidence declines with age. The age group most hit by unemployment are young people below 20. Naturally these job seekers do not have high qualifications or much work experience, so their chances of getting a job are very low. Employers are unwilling to take employees without previous work experience, which also puts this age group in a worse relative position.

Analysing the statistics of the long-term unemployed, we can conclude that men have a higher share within the long-term unemployed than within the total unemployed. This proportion does not seem to change with the fall in unemployment. 90% of the long-term unemployed were younger than 50. One fifth of the long-term unemployed are between 15 and 24 years. Their proportion within the long-term unemployed is lower than within the total unemployed. The situation is reversed within the group of elder people. Especially men just before or after the retirement age constitute a large part of the long-term unemployed.

5.4 *Unemployment by educational attainment*

People without upper secondary education are over-represented among the unemployed. They were the first to lose their jobs. This group also includes those who completed their studies in a vocational or apprentice school without a secondary qualification. The training programmes of the labour centres have been targeting this group.

The unemployment rate of people with low qualifications started to fall later than the average unemployment rate. Their share within the long-term unemployed corresponds to that within the total unemployed.

Table 5.5 Unemployment rate by educational attainment 1992-1998 (%)

Year	Unfinished basic schooling	Finished basic schooling	Apprentice or vocational school	Grammar or other secondary school	College or university degree	Total
1992	17.5	13.9	11.6	7.1	2.7	9.9
1993	27.4	16.4	14.3	8.9	3.0	12.1
1994	25.4	15.6	12.7	7.8	3.1	10.9
1995	26.2	15.2	12.3	7.1	3.0	10.3
1996	31.5	14.6	11.5	7.2	2.7	10.0
1997	31.0	14.2	10.0	5.9	1.8	8.8
1998 *	29.2	11.7	8.3	5.9	1.9	7.6

*Source: CSO LFS. * The sample of the Labour Force Survey (LFS) has been broadened from 1998, so data are not fully compatible with the latest survey outcomes. Q3 1998.*

5.5 *Unemployment by region and ethnic groups*

The trends in regional unemployment show than in the western and central regions unemployment is decreasing while in the eastern part of the country the unemployment rate is practically unchanged. (See Table 3.9 above). The disparities increased especially during 1991-1992. Since then regional differences in unemployment have been slowly decreasing. The unemployment rate is the highest in the northern part of Hungary. The "best" regions are Central Hungary and Western-Transdanubia.

In 1998, 40% of the registered unemployed lived in the less favoured eastern regions. Since Hungarians are very immobile, the solution could be to subsidise the opening of new factories. However, the low qualifications of the labour force would mean a risk that the newly created demand would not be met by the supply. Since the unemployed persons in these regions are from the older age groups, retraining cannot help easily, either. (See Table 3.9 and also Tables A25 and A26 in the Table appendix).

The Hungarian Romany minority is over-represented within the group of unemployed. Just to give some figures (for people with low educational attainment), in 1990 the average unemployment rate was 3.8% while the Romany unemployment rate was 10.4%. In 1993 the same figures were 20.08% and 52.66%[3]. Unfortunately there are no more recent statistics but the trends are evident even so.

3 The 1990 figures are coming from the Census, while the 1993 figures with respect to the Romany population are coming from the 1993 National Representative Romany Survey of the Institute of Sociology and the Institute of Economics of the Hungarian Academy of Sciences. The latter is the only nationally representative Romany survey since 1973. Throughout the study we use the results of this survey (e.g. Ábraham-Kertesi [1998], Kertesi [1994], Kézdi [1999]). The methodology of the survery is documented in Kertesi-Kézdi [1999].

6. Vocational Education and Training Systems

6.1 *Initial vocational education*

Most schools (80-90%, depending on school-types) are maintained by local municipalities. The remaining ones are maintained by different churches, foundations or economic enterprises.[4] The development tasks connected to this role are carried out by the Ministry of Education and its several national and regional institutes. Among these institutes the National Institute of Vocational Education has special importance. Since 1 Sept 1998, the curricula of vocational education carried out in the framework of the normal school system have to be developed in accordance with the examination requirements of the National Qualification Register.[5] The National Vocational and Educational Council is the governmental institution in charge of educational planning, identification of training needs and adjustment of the educational system.

Fundamentally, there are four different possibilities for pupils who successfully complete basic schooling and are willing to continue to a higher educational level. They can choose between a grammar school (only general education, mainly preparing for studies at a college or university), a secondary vocational school (both general and vocational training, with the possibility of applying to a college or a university after graduation), a vocational school or an apprenticeship school (emphasis on vocational training, no maturity exam). In addition, there exist (1 to 3 year) post-secondary full-time vocational programmes organised by either secondary level schools or higher educational institutions. These programmes typically require the maturity exam.

Table 6.1 Educational attainment of the working age (15-74) population, 2nd quarter 1997 (percentage shares)

	15-24	25-39	40-59	60-74	Total
ISCED 0-2	52.9	21.8	40.1	80.2	45.6
ISCED 3	45.9	65.7	47.1	13.2	45.2
ISCED 5-7	1.2	12.5	12.8	6.6	9.2
Total	100	100	100	100	100

Source: CSO, LFS.

4 The structure of the Hungarian educational system is presented in Figure B.1 in Annex B.

5 Connected to the vocational examination requirements, central educational programmes have been developed which are the guidelines for the schools in shaping their own local vocational and pedagogical plans. Schools can incorporate training materials providing new modern and special knowledge into the curricula. The percentage of these new materials is about 20-30%.

Choice of schooling

Although both apprenticeship schools and secondary schools gave vocational qualifications at a similar level in principle, we saw in Chapter 2 above that wage differentials between employees without the maturity exam and with this exam increased after the transition. Also, employees with only low level vocational training are more exposed to unemployment. This all implies that the labour market favours employees with the academic school-leaving exam; further, this is the path to eligibility for higher education degrees. These processes are reflected in enrolment rates during the transition: apprenticeship schools and vocational schools became less and less popular, and at the same time enrolment in secondary vocational schools and grammar schools increased (Table 6.2).

Table 6.2 Participation in all education and in vocational education, 1997

Age group	Secondary vocational schools		Apprenticeship schools		Vocational schools		All education	
	Number	%	Number	%	Number	%	Number	%
4-17	162 912	28.8	112 421	19.9	7 926	1.4	445 813	78.8
18-22	61 828	7.0	18 559	2.1	3 330	0.4	211 878	24.0

Source: CSO.

In 1989 the enrolment of 15-18 years old in grammar schools was 19.7 % and in vocational secondary schools it was 33.5 %; by 1996 these ratios had increased to 22.3 and 40.5 % respectively. At the same time the enrolment at apprenticeship schools and vocational schools decreased from 36.1 % to 25.1 % among the 15-17 age group.

This is the result of parents being less and less willing to send their children to apprenticeship schools or vocational schools that do not prepare them for a higher educational level and give worse labour market prospects in general. There have been proposals to close all schools providing vocational skills on a lower level than a secondary vocational school. Such ideas could not be easily realised, because the 25 % enrolment rate implies that there is significant demand for this type of education.

Funding of initial vocational training

Most schools (80-90%, depending on school types) are maintained by local municipalities. The remaining ones are maintained by churces, foundations or economic enterprises. The municipalities receive money from the central budget for the maintenance of the schools according to the quota system and then give it to the management of the schools. Beside the quotas received from the municipalities there are other central sources guaranteeing the operation of schools as well. Schools can receive support from these sources by competition. Such sources are the labour market and vocational segments of programmes of the World Bank and Phare.

The funding of the initial vocational education comes basically from the Labour Market Fund. Companies are obliged to pay 1.5 % of their total wage bill into the Fund. They can use 0.2 % (planned to be raised to 0.5 %) for their own internal training courses. Large-scale companies usually spend more, 3-5 %, of their income on training.

Table 6.3 Expenditure per student by type of education, 1990, 1993, 1996 (HUF at current prices and 1996 prices)

	1990		1993		1996
	Current prices	1996 prices	Current prices	1996 prices	Current prices
Kindergartens	39 583	158 055	75 082	140 103	120 495
Primary schools	37 169	148 416	77 476	144 570	123 652
Sec. grammar school	48 877	195 166	88 372	164 902	133 363
Sec. vocational school	58 974	235 483	103 406	192 956	137 729
Apprentice school	47 728	190 578	110 440	206 081	142 549
College, university	200 133	799 131	339 942	634 332	367 749

Source: Education-training 1988-1997, Statistical yearbook 1997

The trend of expenditure per student shows that in real terms less and less money is available for educational purposes (Table 6.3).

On the other hand the student/teacher ratio is increasing in all school types except universities and colleges (Table 6.4). This is in accordance with the fact that there are less children entering school every year. This indicates also that there is an argument that the reform of the public education system should involve layoffs of teachers. At the same time it seems that there is a huge increase in the load of college/university professors (however, this load is still not extremely high). Here the reason is twofold. First, university enrolment increased greatly during the transition (from 14.2 to 22.9 % among the 18-22 age group between 1990 and 1996), and second, because of financial constraints on universities and because of the "brain drain" to the private (business) sector, the number of professors decreased or remained constant.

Table 6.4 Student /teacher ratio in the academic year 1990-1991, 1997-1998

	1990	1997
Primary school	12.5	11.6
Sec. grammar school,	13.9	12.4
Sec. voc. school	17.2	16.6
Apprenticeship school	40.9	36.6
College, University	4.4	7.8

Source: Education-training 1988-1997, Statistical yearbook 1997

Links to the labour market

It is not easy to evaluate how far the Hungarian initial vocational education is able to meet the challenges of the labour market changes. On the one hand it is clear that youngsters are opting for higher level vocational education to a greater extent. This is good because the labour market favours this level, and moreover this makes them better able to continue to college or university level. On the

other hand it seems that the occupational structure and the technological level of the vocational training is rather rigid; it reacts only slowly to the dynamic changes of demand due to technological changes. There are several reasons behind these phenomena; as we have described, the introduction of new qualifications and/or changes in the main curricula require a lot of bureaucracy and consequently time (years). The other reason derives from the lack of co-operation between employers' organisations and chambers and the vocational schools.

Although social partnership in Hungary is traditionally better developed than in other Central and East European countries,[6] the social partners are not active in shaping vocational and pedagogical plans. The lack of co-operation is one of the biggest problems in the development of the qualification structure. Closer co-operation would be crucial to adapting the vocational system to react faster and more efficiently to the changing labour market.

Links between enterprises and schools

In the period 1990-95, the main skills training objective was to fill the gap left by the closure of large state enterprises and the withdrawal of large companies from practical training. In the new situation, proper facilities and opportunities had to be provided for the practical training of students. By the mid-90s, with the economic and industrial recovery the training activities of small and medium-sized enterprises (SMEs) and private businesses regained some significance, balancing the reduced training capacity of large companies. (SMEs are provided with tax relief to facilitate training.) Between 1990 and 1998, the participation of small businesses and the private sector became increasingly significant in practical training.

Links between companies and secondary vocational schools are in most cases based on unofficial bilateral talks aimed at securing financial support from the companies. In some cases the companies also assist the schools with professional advice.

In regions where the schools have good communication with the economic players and have a clear understanding of the labour market expectations, relevant skills are offered to students. At present, the prevailing trend is that the management of secondary schools identifies policy advantages, request assistance to determine specialisation, develops curricula and request further placement training for their teachers so that they can develop and improve their skills. Summer practical weeks are part of the curricula of most schools involved in vocational education. They maintain relations with several hundreds of companies. The capacity of acceptance of the companies varies from a few students to that of several hundreds.

Romany minority

Another important issue in vocational training and in general in education is the problem of the Romany minority. Not only the educational record and consequently labour market possibilities of Romany adults are low, but also Romany children perform rather badly in schools. In 1993, in the 16-year cohort, only 32 % of Romany children were studying while in the case of non-Romanies this proportion was 92 %. For the 17-year cohort these figures are 22 % and 80 % respectively. The situation is even worse if we look at what level they are studying: in the case of the Romany population only 6 % of the 17-year-old cohort is studying at a level leading to the maturity exam, as

6 This is the result of the fact that quasi associations like the National Craftsmen's Association existed even under communist rule. In 1998 other key players in the social partnership, i.e. the National Reconciliation Council and the Association of Manufacturers, were formed.

opposed to 43 % of the non-Romany population. By the age of 18, only 7 % of the Romany population was in school in 1993. Moreover, drop-out rates among Romany pupils are also much higher than the Hungarian average. Therefore Romany pupils are inheriting the low educational background and consequently the difficult labour market situation of their parents.

These figures indicate that there is an urgent need to help the Romany minority to escape from this vicious circle, because job market entrants without any vocational qualification and without the academic school-leaving exam have very limited chances of finding a job. Furthermore, they also have limited access to training, since they lack the required basis for many training programmes. Therefore one of the main tasks of the Hungarian educational and social system is to better promote the education of the Romany minority.

6.2 *Continuing vocational training and adult training*

The Ministry of Economic Affairs is the responsible body for adult training as an active labour market measure. Continuing vocational training is regulated by a number of laws, adopted at various periods in time. These regulations do not form a coherent system. Continuing vocational training is performed in various types of training institutions and the degree of the state support of continuing vocational training depends predominantly on the labour market status of the participants.

Accredited higher vocational training is implemented by co-operation between vocational secondary schools and higher educational institutions - namely colleges and universities. Studies are counted as credits at the college or university, as provided in the modified Higher Education Act. Accredited higher vocational training can take place in colleges, universities or vocational secondary schools.

Funding of continuing vocational training

There is no comprehensive, single governmental policy concerning continuing vocational training in Hungary. This is one of the reasons for the lack of a cost sharing system that would stimulate active employees to participate in training. Within the governmental subsidy system priority continues to be attached to training within the schooling system and training related to unemployment. The programmes for training active employees (to acquire second qualifications, and to expand and maintain knowledge) are financed on a commercial basis. Besides the subsidised forms of training in the labour market there are two options for active employees. First, they can cover the costs of their training themselves. At the level of the individual citizen there is no tax preference whatsoever relating to the costs of continuing vocational training. Second, if the training is also in the interest of the employer, then the employer may undertake to pay part or all of the expenses.

The training of active employees (so called preventive training) may be subsidised if the employer undertakes to continue the employment of the participant after the training for a period at least as long as the training itself or contributes at least 50% to the training costs (or provides the vocational/professional, material and personal requirements for the training). This is the only form of continuing training we have data about, since it is financed by the labour centres. In June 1998 only 1285 employees participated in this programme, which illustrates its low significance.

Adult training

The responsible body for adult training as an active labour market measure is the Ministry of Economic Affairs. Responsibility for the realisation of employment policy goals lies with the Ministry of Social and Family Affairs, while the development of adult training is within the authority of the Ministry of Education.

Before 1998 the whole adult education sector was organised by the Ministry of Labour. Adult training in the normal school system can be realised in the framework of evening classes. The network of regional retraining centres established with the help of the World Bank also plays an important role in adult training. Adult training providers are almost all market-oriented, so there is a balance of demand and supply.

There are three different dimensions to the adult training policies.

- Training according to target groups. A special programme has been launched for young people, who have just started their career. Another programme (with the support of Phare and the National Vocational Council) deals with the labour market integration of disabled persons. Another significant project deals with the socialisation of the Romany minority.
- Regional policies. Regional policies in adult training. Adult training (together with the training of the unemployed) is mainly carried out in the framework of the network of labour centres. These centres work on a regional basis, thus they have the opportunity to develop regional policies. Training opportunities meeting regional demands can be ensured with their support.
- Activities by sectors. Training policies on a sectoral basis cannot be found in Hungary. The reason for this fact is that the presence of the different professional associations in the field of vocational education is insignificant. Therefore, probably one of the most important tasks in the future development of the vocational education system is the establishment of an institutional system organised on a sectoral level. This would include the development of the qualifications structure, the development of training programmes and the training of tutors.

Management training

An important element of adult training is management training. First, there is extensive management training in multinational and large domestic financial and manufacturing companies financed and organised by the company for the executives of the firm. We do not have data on this and the training is extremely heterogeneous, ranging from information technology sessions through brain storming to courses on positive thinking. However, most probably each managerial employee at these firms participates at least in one of these training programmes annually. These courses have helped in adopting Western management methods.

The other type of management training targets the owners and managers of newly established SMEs and is subsidised by the government. The objective is to transmit management skills and market economy perspectives to new entrepreneurs. These programmes are also heterogeneous and range from instructive television series on corporate law and marketing to management consultancy services to SMEs financed by the government. In the early 1990s a television series - a "soap opera" - was financed from this money to teach Hungarians how to manage SMEs. However, there is no available evidence on the impact of this human capital investment.

Institutions providing adult training

The state continues to be the largest customer in the vocational training market primarily in the form of training programmes subsidised by labour market mechanisms. Therefore, competition between the institutions providing training services is aimed primarily at winning tenders financed from public money.

Professional/vocational chambers that have been organised on the basis of the Chambers Act of 1994, also organise training programmes.

Private business entities performing training activities have played a very important role since the early 1990s.[7] There are tens of thousands of private firms that include vocational training in the list of their business activities. The number actually operating training businesses, however, is small. Experts estimate that they number between 500 and 600. These training organisers typically offer short professional/vocational courses (especially in fashionable professions/vocations), including IT training, language teaching, manager training, entrepreneurial and financial management, office work and administration, and consultancy.

Non-governmental organisations play a relatively small role in the vocational training market. This sector includes foundations, non-profit organisations whose training activities are not significant in terms of volume, but whose participation - which is also granted governmental preference - is on the increase. They play a major part in the implementation of complex projects organised for various special groups (e.g. disadvantaged groups of the society, the Romany minority).

It is difficult to evaluate the efficiency of vocational adult training in Hungary. There are many different types of institutions that participate in adult training and to a large degree training is financed privately by the employers or by the employees. In many cases training is organised by the employers and there is then no data showing that training has taken place.

The above discussion also suggests that more co-ordination between governmental bodies (different ministries, the labour centre network) and the employers' organisations is needed, because there are several segments (mainly regional and ethnic dimensions) where there are indications of under-investment, and where intervention may therefore be helpful.

6.3. Training of the unemployed

The training of unemployed people is mostly carried out in the framework of training courses organised with the support of the labour centres. For participating in these courses that are organised by schools, regional training centres or market-oriented training companies, the unemployed can receive varying degrees of financial aid from the government to pay the costs of the training. The governmental support is sometimes as high as 100 %.

The expenses of the labour centres are covered almost completely by the labour market fund. The maintenance costs of the nine regional labour force development and training centres established in 1992-1997 within the framework of the labour market organisation system, using a substantial World Bank loan (and also Government and local government funds), are only partly covered by central funding sources.

7 The establishment of such entities is governed by the same rules as that of other businesses (there are no special provisions or restrictions, the pursuance of the activities is governed by the relevant provisions of the Vocational Training Act).

In Table 6.5 we present some data on participation in training programmes. Figures show that participation in training is rather low in Hungary (6.2%), though it is highly concentrated among job market entrants. Also there is obviously a huge discrepancy between the distribution of total registered unemployment and training participants with respect to their age and educational background. While young people (below 30) amount to only 32 % of total registered unemployment, they constitute 77.7 % of the training participants. This reflects two facts: first, they are more capable of training because they left formal education relatively recently. Second, investing in training pays off better for a younger person, because she can benefit from the returns in the longer run.

Also there are significant differences by educational background 78.4 % of the total registered unemployed do not have an academic school-leaving exam, but these low-educated people constitute only 37.1 % of total participation in training. The reason is that unemployed people with a low level of general training are less capable of further training. We can see this if we remember that training is concentrated within information technology, office work, marketing studies and similar professions that require some general knowledge.

Summarising, we claim that training seems to be inadequate in relieving unemployment, both because it covers only a small fraction of the unemployed and because it seems to be less available for the most endangered groups (people with very low educational background and/or higher age). On the other hand it seems to be a rather efficient measure for adjusting the discrepancies between the qualification composition of job market entrants and labour demand. However, we must note that low-level vocational education seems to be in a deadlock also in this respect, because unemployed people with this educational level are highly over-represented among total unemployment and highly underrepresented among training participants.

Table 6.5 Participation in training programmes for the unemployed (June- July 1998)

Total registered unemployment	409 745
Total number of participants in training	25 463 (6.2%)
of which language training	1 052 (4.1%)
of which job market entrant	8593 (33.7%)

Distribution by age (%)			Distribution by schooling (%)		
	All unemployed	Participants		All unemployed	Participants
below 19	3.3	18.2	8 grades or less	41.7	21.1
20-24	14.1	47.9	Apprenticeship school	36.6	16.0
25-29	15.6	11.6	Secondary vocational school	9.3	25.8
30-39	28.3	11.7	Post-secondary vocational	2.7	6.3
40-49	28.2	8.0	Grammar school	7.4	24.5
50-59	10.5	1.6	College/university	2.3	6.3

Source: National Labour Centre

Young people just starting their professional career have some opportunities for life-long learning courses. This training primarily provides new basic knowledge and does not prepare for a new qualification. The most popular among such free courses are the ones dealing with information technology, foreign languages, economic sciences and marketing. These training courses are organised in the framework of evening classes or in a few cases distance learning. Such further training courses are partly or fully supported by the employers. Programmes aiming at the acquisition of a new higher qualification are available to practically everybody in the form of a paying or partly paying course organised by several higher educational institutes.

7. Labour Market Institutions

7.1 Government bodies

Between 1990 and 1998 the Ministry of Labour was responsible for all labour related public activities, such as

- employment policy and services
- wage policy and national level wage negotiations
- vocational education and training
- labour and labour safety inspection
- labour relations policy and labour legislation
- collection of labour statistics and labour research.

In 1998 the Orbán administration redistributed the tasks of different ministries. As a consequence of this restructuring, the Ministry of Labour was eliminated and its responsibilities were redistributed among the Ministry of Economy, the Ministry of Social and Family Issues and the Ministry of Education in the following way:

- wage policy and negotiations, employment policy and the implementation of active labour market instruments now belong to the Ministry of Economy
- vocational training belongs to the Ministry of Education
- all the other tasks belong to the Ministry of Social and Family Affairs, which is the legal successor of the Ministry of Labour.

Tax policy is under the control of the Ministry of Finance and regional policy (including the regional re-training centres) is co-ordinated by the Ministry of Agriculture and Regional Development. We can see that there are several institutions that have an important impact on labour market policy. This implies that under the new system there is a serious danger of co-ordination failures among the several governmental institutions.

Public Employment Service

The regional network of labour market centres is responsible for employment policy and employment and unemployment services. The system is headed by the National Labour Market Centre (OMK). It has 19 county-level and one Budapest labour centre, and almost 200 local labour centres. Currently these centres operate both passive (the unemployment benefit system) and active (e.g. re-training) labour market instruments. Financial means are provided by the Labour Market Fund, which succeeded the Employment Fund and Solidarity Fund in 1996. The legal foundations of this system are given by the 1991 Employment Promotion Act.

Currently the labour centres are operating under the control of the Ministry of Social and Family Affairs. This causes some co-ordination problems between ministries, since until now this network has been responsible for both active and passive labour market policies. However, from 1999 on, active labour market policies are under the control of the Ministry of Economy while passive measures are under the control of the Ministry of Social and Family Affairs.

The labour market centres have to perform many different tasks. Moreover, there are considerable differences between the centres in terms of staff size, competencies and the scope of authority. Therefore there are disparities in the organisational structure of different levels and in the quality in fulfilling labour market needs. Labour market centres have concentrated their activities on administering active and passive labour market measures, so that in most cases their labour exchange and counselling activities have been limited.

This is partly due to the fact that the staff of employment offices does not have a sufficient background for performing these tasks. Although a national computer system exists for matching job seekers and vacancies, the system is not widely used by officers because it is not sensitive enough to identify the specific needs of seekers and employers.

Another important defect of the public employment services is that they usually maintain only formal relationships with employers. Obviously, this makes it more difficult to perform the labour service and counselling tasks well. The market share of public employment offices has been decreasing in recent years, and it is below 40 % by now. Since the labour market centres play a crucial role in solving the problem of the long-run unemployed, they have to be reformed in a way that will enable them to perform better in labour exchange and counselling. However, for this an evaluation scheme for labour exchange activities should be developed to monitor the operations of individual centres or officers.

The National Labour and Labour Safety Inspectorate (OMMF) and its county network are responsible for supervising labour safety measures at the firm level and in general for controlling whether employers are conforming to labour market regulations or not. Among other tasks they are responsible for fighting black employment.

The regional re-training centres are responsible for implementing training programmes. Their establishment was financed by the World Bank and they are currently operating under the supervision of the Ministry of Agriculture and Regional Development.

7.2 *Labour market regulations*

Legislation related to employment relationships consists of three major parts:

- the Labour Code covers mostly the competitive sphere
- the Civil Servants' Act covers public administration employees
- the Public Servants' Act covers public services (education, health, etc.) employees.

The Civil Servants' and the Public Servants' Act contain detailed and rigid prescriptions on job classification, wage scales and promotion. The low level of salaries in the public sector is compensated by better protection against layoffs and by guaranteed promotion.

The Labour Code regulates the market sphere and follows free-market philosophy, thus the employment relationship is based upon individual and/or collective bargaining between the individual employee(s) and employer(s) and government intervention is limited to setting minimum standards.

Working hours are fixed at 8 hours a day. Overtime, special working hours, multiple shifts, work on public holidays, paid leave and the protection of minors and women (pregnant or with a baby below one year) are also regulated by the Labour Code. The Labour Safety Act takes care of labour safety and physical conditions at work. We must note that the state of labour safety is unclear. We have seen a significant decrease in job-related accidents. However, we do not know how much of this reduction may be contributed to the decline of the traditionally dangerous industries (metallurgy, mining, etc.) and how much to the improvement of labour safety. Moreover, there is no reliable information on workplace accidents at newly emerged small enterprises.

The equality of rights (guaranteed by the Constitution) is reflected in the Labour Code. The Constitution outlaws discrimination related to gender, race, colour, language, religion, political opinion, and national or social origin. The Labour Code excludes disadvantageous distinctions between men and women and also declares some protection for women with respect to dangerous occupations and maternity leave. Until recently women's retirement age was lower than that of men (55 years compared to 60), but the level is now equal at 62.

The law also favours disabled workers in several ways. Firms are to provide working places and/or social assistance to employees with altered working capacities. Employers with more than 30 employees are either obliged to employ 5 % disabled persons or pay a contribution to the Rehabilitation Fund, which is used to support the creation and maintenance of jobs for the disabled. Companies employing (seriously) disabled employees are eligible for tax reductions.

Firing costs and severance payments are also regulated in a rather liberal manner. Employees laid off are provided with a period of notice and a severance payment. The employer is required to justify the lay-off and the employee has the right to defend herself against the reasons stated. Notice periods and severance payments are dependent on the tenure in the firm.

Labour market regulations are rather liberal in Hungary, particularly in the private sector. This gives considerable power to the employer, which may be less favourable from the social point of view but has helped greatly in the rapid restructuring of the economy, since firms are rather flexible in their employment policy. However, since the Hungarian economy is over the deep transition crisis by now, more emphasis should be given to the enforcement of regulations regarding labour safety or gender and racial discrimination. The reasons for this are that there is scope for improvement in these issues on the one hand, and Hungary lags behind the European standards in the enforcement of such regulations on the other hand.

7.3 *Labour disputes and industrial relations*

In March 1999, the government introduced its planned system of "social dialogue", which is to replace the existing system of national wage and industrial negotiations. This plan is widely criticised by the social partners, mainly by unions, since the newly established Economic Council has wider scope, but smaller powers. The issue is under intense political debate, and the biggest unions are not willing to attend the meetings of the new institutions, because they think that their legislative basis is inadequate. Because of these problems and because the new system started to work in April 1999, the practical role and the operational efficiency of the new system is not clear. In any case, the main structure of tripartism has not changed significantly, and it is therefore worth describing it and evaluating the extent to which tripartism has influenced the Hungarian labour market.

Tripartism

The key institution of the national level tripartism used to be the Council for the Reconciliation of Interests (CRI), established in August 1990. Two forums of different nature replaced it:

1.) The Economic Council is a consultative body, where the strategic economic issues are discussed. The participants are those organisations that are strong enough to influence the economy considerably, such as: trade unions, employers' organisations, Hungarian National Bank, the representative of the Bank Association, economic chambers, multinational investors, Council of Stock Exchange. The government is represented at a high level.

2.) The National Labour Council is the other forum, which is the successor of the earlier Council. This is a tripartite council for consultation and negotiation on labour issues. It deals with labour law, labour relations, employment policy, social policy, vocational training, wages in the competitive sector, labour safety, labour inspection, etc. It has inherited the power to set the national minimum wage, and to agree on the recommended wage increases.

With the outlined changes, the intention of the government was to widen central consultation on economic issues, through the involvement of more actors and to separate general economic policy issues and labour matters, where tripartism continues to play an important role. These shifts obviously influenced the previous role and powers of the social partners.

The tripartite Labour Market Fund Steering Committee is of utmost importance. It was created in January 1997 for administering the Labour Market Fund equal to roughly HUF 130 billion. The disposal right over the fund is formally granted to the Minister of Social and Family Affairs (earlier, Minister of Labour), but according to the law, the Minister exercises this right jointly with the Labour Market Fund Steering Committee. It means, that the Fund is actually administered by the tripartite body. The Committee has extensive powers in the money-related issues of the LMF, such as: drafting the Labour Marker Fund's annual budget, deciding on the reallocation among the sub-funds, deciding on the co-financing the national programmes for economic and regional development in the case of the Employment and Rehabilitation sub-funds: deciding on the extent of decentralisation and the allocation formula based on labour market indicators, evaluating the expenditures at least every third month, etc.

At the decentralised level, the County Employment Offices and Labour Councils bear the same joint responsibility over the decentralised funds. The extent of decentralisation varies. In the case of the Employment sub-fund it is almost 90 % of the total. The underlying shared view is, that local actors can best respond to the local needs and thus can most efficiently utilise the allocated sources.

In 1997 the Labour Mediation and Arbitration Service was established to assist in firm-level wage or any other labour-related disputes.

Collective bargaining

- The amount of collective bargaining has decreased somewhat in the private sector during the transition period.
- While trade unions have survived in privatised state-owned firms, in newly established companies and SMEs they have very little representation.
- There has been a sharp decline in the number of (sectoral or regional-level) multi-employer agreements.

The above facts have some traditional explanations: trade unions were never really powerful in Hungary, and therefore collective bargaining was never very important. However, there are other reasons deriving from the industrial structure of the Hungarian economy: trade unions all over the world are typically strong in heavy industry and mining, the industries that have become rather insignificant after the transition.

This implies that collective bargaining is mainly reduced to the public sector and to some traditional state-run enterprises, like the Hungarian State Railways or the Budapest Transportation Company.

Strikes

The Strike Act (1989) provides for the regulation of collective labour disputes. In firms, Works Councils are elected by employees to represent the employees in negotiations. Collective agreements can be achieved at enterprise or higher (multi-employer, sectoral) level. Only one agreement can be concluded at a given enterprise and agreement requires the approval of more than 50 % of employees voting in the Works Council elections.

Strikes for economic reasons are permitted but strikes for political interests are prohibited. Moreover some fields (e.g. the armed forces and the judiciary) are excluded from the strike law, and in other areas (e.g. railways), even during strikes the maintenance of "essential services" is required. Strikes can be called after attempts at a reconciliation of interests have failed. State mediation and/or arbitration can be requested by the negotiators.

Other kinds of labour disputes are also settled by direct negotiations between the two parties with the occasional help of the National Mediation and Arbitration Service. Unsolved disputes are decided by the county-level Labour Courts.

We must note that strikes are rare and insignificant: only 10-20 are reported yearly, mostly of the warning type (2 hours). Longer and more important strikes have occurred in the State Railways company (1995 and 1998).

It is difficult to evaluate the status of industrial relations and labour disputes unambiguously. On the one hand, the low power of trade unions and individual labour contracts make the labour market more flexible and result in lower labour costs, ceteris paribus. This has a positive impact on economic growth and in the long run on employment. On the other hand, from the workers' point of view it represents a rather asymmetric position, as the bargaining power of employees is relatively low. We believe that for the transition period this feature of the Hungarian labour market was rather useful, because it made it possible to implement considerable restructuring without huge social tensions.

8. Employment Policy

The initial period of transition (1989-1992) was characterised by active instruments. However, by 1993 the pressure on unemployment policy had doubled, both because of the increase in the number of the unemployed and because of the decrease in financial resources.

Table 8.1. Expenditure on active and passive employment measures 1994-1998, billion HUF and % GDP

	1992	1993	1994	1995	1996	1997	1998
Total expenditure (HUF)			83.3	77.4	91.6	121.1	146.6
% GDP	2.81	2.79	1.83	1.35	1.13	1.07	
Passive measures(HUF)			52.4	49	51.4	54.9	64.1
% GDP	2.21	2.13	1.22	0.92	0.76	0.63	
of which % GDP							
Unemployment compensation	2.15	2.02	1.07	0.72	0.60	0.46	
Early retirement	0.05	0.11	0.15	0.19	0.16	0.17	
Active measures (HUF)			30.9	28.4	30.6	46.3	61.4
% GDP	0.61	0.66	0.61	0.43	0.37	0.44	
of which % GDP							
PES and adm	0.15	0.15	0.15	0.13	0.11	0.13	
Training	0.15	0.23	0.19	0.13	0.08	0.08	
Subsidised employment	0.31	0.28	0.27	0.17	0.18	0.23	

Source: Ministry of Labour (1998) .

As a result, employers' and employees' contributions gradually increased, and meanwhile unemployment benefits became less generous. Active measures were given much less emphasis both because of the financial constraints and because the public was rather sceptical about their impact. However, the decline in the numbers of the unemployed and the problem of long-term unemployment have again shifted the focus of labour market policy towards active measures. Table 8.1 shows the amounts of resources spent on labour market policies in HUF and as a fraction of GDP. Table A27 (Appendix A) shows the number of unemployed benefiting from one of the active or passive measures.

8.1 Passive labour market measures

The three most important passive instruments are the unemployment benefit, income support and early retirement. While the system of unemployment benefit is connected to earnings (an insurance device), the latter two measures are instead parts of social assistance. At the end of 1997, of the 464 thousand registered unemployed, 30 % received the unemployment benefit and 42 % income support, besides the 64 thousand unemployed who went into early retirement up until 1997 (these are not involved among the number of registered unemployed). Table 8.2 shows the coverage of the unemployment benefit system.

The unemployment benefit

This assistance is available if an unemployed person

- is not entitled to a pension
- is capable of and available for work
- co-operates with the labour market centre (i.e. visits the centre within given time limits and accepts the job offers given by the centre)
- has made some contribution to the Labour Market Fund (for at least 360 days)
- is not offered a suitable job by the labour market centre.

Unemployment benefits

- are available for a maximum of one year
- have a level of between 65 and 75 % of previous earnings
- have a minimum and maximum level tied to the minimum old-age pension.

Table 8.2 Coverage of the unemployment benefit system 1990-1997 (% of registered unemployment)

Period	Coverage of Unemployment Benefit	Coverage of Income Support	Total Coverage
December 1990	77.6	-	77.6
December 1991	76.8	-	76.8
December 1992	71.9	6.2	78.1
December 1993	51.7	22.4	74.1
December 1994	36.9	39.8	76.7
December 1995	40.1	38.9	79.0
December 1996	29.2	44.3	73.5
March 1997	30.0	42.8	72.8
June 1997	30.0	44.9	74.9
December 1997	29.4	41.9	71.3

Source: Boeri-Pulay (1998)

The unemployment system is gradually becoming less generous; in 1993-94 the entitlement period became one year instead of two years. On the other hand, the unemployed requalify for the benefit after certifying 180 days of work.

Income support

As we saw in Chapter 5, long-term unemployment is an increasingly relevant problem in Hungary. The long-term unemployed, after exhausting their entitlement to unemployment benefits, may receive income support (below the minimum unemployment benefit level) for two years (depending on their income level). This support is 25 % financed by the local government and 75 % by the Labour Market Fund. We must emphasise that this measure is available only for those who are (long-term) unemployed, and also differs from general social assistance because it is mainly financed from the Labour Market Fund.

Early retirement

By 1998, 180 000 unemployed people had gone into early retirement. This option was attractive because it provided a certain reasonably high income to unemployed people who (partly because of their age) had little chance of finding a decent job. However, since retirement ages have changed, and early retirement had some counter-incentive effects, from 1998 it has been replaced by the pre-retirement unemployment benefit, which gives the same amount as the income support and can be seen as the continuation of income support for unemployed people for at most five years before their retirement age.

Job market entrants

Young unemployed school leavers were entitled to receive unemployment benefits at a level 75 % of the minimum wage until 1995. In 1996 this type of assistance was replaced because of its counter-incentive impact, and wage subsidies for their employment were introduced instead. This scheme is in fact a combination of a wage subsidy and on-the-job training. Therefore in this case a passive measure was exchanged for an active measure.

Few studies evaluating the impact of passive measures are available. The two most noteworthy ones are Mickelwright and Nagy (1998) and Wolff (1997). A well-functioning unemployment insurance system helps the unemployed to return to the labour market. However, a spell of unemployment in Hungary typically ends by exhausting the entitlement to the benefit, which implies that it is very difficult to return to the labour market after being registered. The change in the entitlement period in 1993 provided a natural experiment for analysing the disincentive impact. It was claimed that one of the reasons for long-term unemployment was the generosity of the benefit system, so Wolff (1997) checked whether hazard rates from unemployment to employment changed or not after the system had become stricter. The finding was that hazard rates of employment hardly changed after the reform, so the reasons for long-term unemployment do not derive from the benefit system. However, we must add that after the reform, the hazard rates to active labour market programmes increased (not considerably but noticeably), that is, the reform had in fact some positive impact.

8.2. Active labour market measures

Most of the important active labour market measures can be found in Hungary. However, they are relatively less important, mostly because of the nature of Hungarian unemployment and because of the scepticism that surrounds them. As we have pointed out, Hungarian unemployment has very uneven regional distribution and it is also highly concentrated among low-educated people, and labour demand for this educational group is small. These features limit the possibilities of active measures. However a bulletin of the Ministry of Labour in 1998 assessed that without these measures the unemployment rate would be 3 % higher at least.

The usage of the financial resources for active measures is mainly decided at the county level (90 % of them). This implies significant differences across the counties. In the counties with high unemployment, it is primarily wage subsidies and public relief and public work programmes that are financed, while in the counties where labour demand is reasonably high more emphasis is put on (mainly preventive) training.

Job search

Job search assistance is provided by the local labour centres, but since the unemployed are not really mobile and are concentrated in regions where not many vacancies are registered and also not many new vacancies are created for low-educated people, this assistance has limited power to reduce unemployment. Some performance indicators are shown in Table 8.3. (See also Section 7.1, where we discussed the efficiency of the labour exchange activities of the labour centres.)

Table 8.3 Performance indicators on the efficiency of the employment service 1996

1996	1st quarter	2nd quarter	3rd quarter	4th quarter
Total placements	166556	241565	237772	223008
Realised matchings	85333	124020	110588	99328
% of total placements	51.2	51.3	47.5	44.5
Successfully completed matchings	44144	66655	56368	49087
% of total placements	26.5	27.6	24.2	22.0
Placements failed because of the job-seeker *% of total unsuccessful placements*	43.5	55.5	56.1	54.2

Source: ILO (1998)

Training and re-training

The second typical active measure is training and re-training. Training is financed by the local labour centres. In most cases it is also organised and carried out at these centres. However, the regional re-training centres and other public and private institutions are increasingly taking part in organising and implementing training programmes.

In the most recent years 4-8 % of the registered unemployed have taken part in the re-training programmes, which amounts to about one-fourth of the participants in the active programmes. The

proportion of participants in preventive training is quite small; each year it has been below 10 %. We have discussed training in detail in the context of vocational education in section 6.3. (See also Table A27 in the appendix.)

Job creation

There are different forms of subsidising job creation. The most important is the support of the employment of the unemployed, which covers 50-100 % of the employee's earnings for a maximum of one year, while the employer has to provide employment for at least double the subsidised period. This scheme is similar to the subsidy of the employment of job market entrants, which replaced the direct monetary support to them. Another means of supporting job creation is the support of business start-ups for unemployed people.

Similar schemes exist directly supporting the creation of new jobs and especially supporting firms in areas where unemployment is already high to enable them to keep their work-force. This support can take the form of a wage subsidy or assumption of responsibility for paying social security contributions.

There are two elements to "direct" job creation by the state. The first is public relief work, which is organised by local governments and for which 70-80 % of the employment costs are covered from active instruments. These works are typically community tasks such as cleaning public areas and environmental works. In the most recent years this measure has become the most widely used active measure. The reason is that since after income support the entire burden of social assistance to the unemployed is on the municipalities, they have used public relief work to a great extent to "return" the unemployed to the state-financed benefit system: after some months of public relief work, the unemployed are again eligible for unemployment benefit or income support.

There is one reasonably new initiative in direct job creation: public works. This covers centrally organised projects, which are compatible with some national objective and require a considerable work-force. The biggest project launched so far is the national programme for planting new forests and rehabilitating existing ones. Also many unemployed people have joined projects relating to anti-flood efforts.

Impact analysis

Few impact studies have been undertaken to analyse active labour market policies in Hungary. One notable exception is O'Leary (1997). He analysed the impact of five different active measures (group retraining, individual retraining, wage subsidies, public relief work, self-employment subsidies) on employment probability and earnings. Both employment probability and earnings are measured after completing the given active programme. The sample of unemployed persons who participate in active programmes is not a random sample, so in order to single out the impact of the given measure, he had to control for different individual characteristics due to self-selection, by means of a regression analysis.

His results are preliminary, but very informative. Training (both types) increases the employment probability by an average of 10 %. Self-employment subsidies increase the probability of employment by 13-15 % after adjusting for individual characteristics (without adjustment the increase is around 40 %). On the other hand, wage subsidies and public relief work decrease the probability of employment; in the case of wage subsidies this reduction is about 10 %, while in the case of public relief work it is between 26 and 37 %. The reason for the negative impact of public

relief work is that many unemployed persons and town halls use public relief work as a way to re-enter the unemployment insurance system: after some months of public relief work they become eligible again for unemployment benefits, which are higher than income support and are totally financed by the Labour Market Fund.

If we look at the impact on wages, the results are different. All measures have a positive impact on future earnings. Training and wage subsidies increase future earnings by 10-13 %, public relief work by 4-5 % (all of these are statistically significant). On the other hand, self-employment subsidies seem to decrease future earnings by 25-40 % (depending on the specification), but this is probably due to two distinct features. First, with starting businesses we cannot expect high income at the beginning. Second, small entrepreneurs in Hungary typically under-report their income to avoid high taxation.

The study also analyses whether or not the use of different labour market centre services increases the probability of employment and future earnings. The result is that there is a modest but statistically significant 2-9 % increase in employment probability due to the employment service (depending on whether the unemployed person participated in some other active programme or not). However, the employment service has no statistically significant impact on future earnings.

The analysis suggests that most of the active measures have some positive impact. However, the ones (wage subsidies, public relief work) that target the long-term unemployed seem to be the least successful. This both gives an explanation why long-term unemployment is increasing and shows the direction for future improvements in active labour market policy. The introduction of public works projects was partly an answer to this challenge, but since it was only introduced in 1998, no data are available on its impact yet.

8.3 *Industrial policies*

Probably the most efficient way to create employment is an industrial policy that favours the establishment of new businesses. In the case of Hungary we can mention two rather successful types of this policy. One form supports "green-field" (typically foreign) investment. The support mostly takes the form of tax reductions. This investment has generated jobs not only directly, but also indirectly, because the multinational companies (General Motors, General Electric, Audi, IBM, etc.) have started to buy the components of their products increasingly from Hungarian producers. However, this investment activity has had a very uneven regional distribution, being concentrated around Budapest and in the north-western area of Hungary. In consequence, by 1998 unemployment in these regions had become merely frictional and in some professions labour shortages were reported.

Another industrial policy supporting job creation or in this case rather job maintenance has been the support (mainly in the form of preferential loans) to enable the management of state-owned small and medium enterprises to privatise their firms. Although it is claimed that state property was sold out at too low a price in this way, in our opinion in many cases this was the only way for these companies to survive.

These are the elements of industrial policy that may be considered successful from the employment point of view. Still, much remains to be done. The most backward eastern and north-eastern regions have not benefited much from foreign investment so far.

Industrial policies therefore have an important regional role to play in reducing the increasing inequality between Hungarian regions. This should involve subsidising the development of

transportation and the establishment of "industrial parks" in the eastern and north-eastern regions. It should include massive infrastructure developments, since this is one of the major reasons why investors are not attracted by these regions. We must note that these regions (especially the eastern part) are rather agricultural, and a significant part of their agricultural products (both raw and processed) were sold on the markets of the former Soviet Union before the transition. The collapse of the COMECON trade was followed by a sharp decline in these exports, and it took some years to partially recover these channels. However the Russian crisis in 1998 again made these export channels very risky and so made foreign (and domestic) investment less attractive in this region.

As stated in other parts of this study, these regions are also characterised by a lower educational background and a sizeable Romany population. This implies that regional policy needs to be complex and integrated. It should consist of investment subsidies, infrastructure development, educational reform and social measures to help the Romany minority to improve its position. These policies are now co-ordinated by the Ministry of Agriculture and Regional Development. However, their success is highly constrained by the lack of qualified experts on the regional level and because of the lack of co-ordination of different ministries and authorities. This may cause problems with regard to the EU because most EU activities require co-operation at the regional level and the existence of experienced and efficient staff is therefore crucial.

The third element of industrial policy related to job creation is the tax and social security system, which will be discussed in the next subsection.

8.4 *Wage formation, social security and tax policies*

Wage formation

In Hungary the deregulation of wage policy began much earlier, even before the transition, together with the introduction of the personal income tax system. During the privatisation process most wages became freely negotiable in the market sector.

In the public sector on the other hand, a rather strict wage tariff system was introduced. National level wage negotiations are limited to setting the level of minimum wages, and the increase in minimum wages typically lags behind the level of inflation. Since the minimum wage is rather low it does not have an important role in the actual private (and public) sector wage setting process. Aggregate level wage negotiations are also present but are mainly limited to the public sphere (education, health), i.e. to sectors where the government is one of the bargaining partners and the tariff system is under discussion. The level of minimum wages and their relation to average wages and to the subsistence minimum are presented in Table 8.4.

Since the government has been rather restrictive lately concerning wage improvements in the public sector, the wage gap between the private and public sector has increased significantly, especially in professions requiring higher skills. This has the impact of a "brain drain" from the public sector. Some institutions where the competition is very high (Ministries, the National Bank) are using various techniques (paying bonuses, etc.) so as to be able to compensate their employees and prevent them from leaving.

Table 8.4 Minimum wage, average wage and subsistence minimum, 1989-1998. HUF per month and %.

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Gross minimum wage (HUF/month)	3 658	5 017	6 700	8 000	8 917	10 375	12 062	14 308	17 000	19 500
Net minimum wage (HUF/month)	3 294	4 515	5 989	7 122	7 847	9 178	10 671			
Gross minimum wage as a % gross average wage	34.6	37.3	37.4	35.9	32.8	31.2	31.0	30.5	29.7	28.8
Net minimum wage as a % net average wage	40.3	44.7	46.3	45.6	42.7	39.9	41.2			
Subsistence minimum (HUF/month)	3 760	5 349	7 147	8 162	11 183	13 306	19 614			
Gross minimum wage as a % subsistence minimum	97.3	93.8	93.7	98.0	79.7	78.0	61.5			
Net minimum wage as a % subsistence minimum	87.6	84.4	83.8	82.7	70.2	69.0	54.4			

Source: Ministry of Labour(1998) and ILO (1997)

In some sectors there is a definite need for a reform of wage formation (see Tables 2.5 and 2.6). The most important is the health system, where extremely low salaries have "forced" doctors to accept under-the-table payments (gratuities), which constitute the major part of their income. This is an underlying feature of the Hungarian health care system, but the compensation of health care employees ought to be solved within an overall reform of the health care system. The other sector where salaries are extremely low is education. In higher education improvements have been achieved, but the significant problem is that competition from the business sector is very strong. In 1996 the Széchenyi scholarship was introduced to keep the best scholars in academics.

The problems in public education come from various sources. Hungary is experiencing a demographic decline, and at the same time teachers are relatively abundant. Moreover, public education is primarily financed by local governments with financial problems. Therefore improvements in salaries are hardly possible without layoffs, which are also not really acceptable to teachers (and the rest of the society).

Social security

Social security policy is related to the labour market in several ways. The usual complaint of employers is that the burden on wages and salaries in Hungary is too high. Obviously, a decrease in these rates would provide an incentive to more job creation. However, social security has had a high deficit already in recent years, so there is not much scope for decreasing revenues from social security contributions. The Orbán administration has aimed to improve the efficiency of social security, in particular health insurance.

The operations of the health security system have been marked by inefficiency and scandals. Until 1998, health insurance was controlled by a corporate body made up of representatives of the trade unions and employers' organisations. They did not have either the incentives or the knowledge to manage the Fund in the most efficient way. This resulted in wasteful decisions on expenditures, and a low ratio of actual revenues to those due. For this reason health insurance was "re-nationalised" in 1998. Moreover, from 1999 on, social security and tax revenues will be collected together to increase the efficiency of the process. The government claims that by this package of measures it can decrease social security contribution rates while at the same time maintaining or even raising the level of revenues. As we have pointed out, the whole health system needs reform eventually.

With regard to the pension system, two extremely important changes have been introduced in recent years. The retirement age, which was 55 years for women and 60 for men, has become 62 uniformly for both genders. This change has had a clear negative impact on unemployment by increasing the labour supply. On the other hand, increased life expectancies and financial considerations gave strong support to this plan. The state social security system would not be able to operate with the old retirement ages.

The other important change is the introduction of a three-pillar pension system, which consists of the traditional state-run pay-as-you-go system, compulsory private pension insurance and voluntary private pension schemes. This system has been operating quite successfully since 1997. However, it puts an extra burden on the state budget, because the state has to pay pensions to current pensioners from less resources (some of the new contributions are going to private schemes).

Tax policy

We can make the same comments regarding tax policy as on social security. Personal income tax rates are rather high in Hungary. This has several negative impacts, such as less job creation, a smaller labour supply (in the legal sector), and incentives for tax evasion. However the budgetary situation of the country still does not allow a significant decrease in tax revenues. Therefore the objective of the government is to increase the efficiency of the tax-collecting process. For this purpose, as a first step, from 1999 a tax police force was established to investigate tax evasion cases.

Since one of the primary purposes of the government is to support families and to stop the demographic decline and ageing of the Hungarian population, it wants to introduce a family taxation scheme from 2000. However, the detailed concept is not yet known, and for this reason we cannot assess its impact on labour force participation and job creation.

9. Conclusions

Hungary is one of the transition countries that has achieved the most in transforming its centrally planned economy to a market one. Most market institutions have been introduced and privatisation has gone further than in many western countries (electricity supply, power stations, and natural gas providers are partly or totally privatised). By the late 1990s, in most respects the Hungarian economy is working as a standard market economy. In our view this is also true, but to a lesser extent, in the case of labour issues. On the one hand this enables us to view the Hungarian labour market from the market economy point of view, and on the other hand it qualifies Hungary to be one of the candidates to join the EU.

The analysis of this report sheds light on many deficiencies of the Hungarian labour market. Most of them emerge from a combination of the transition crisis and some special features of the Hungarian economy or the Hungarian transition process itself. In this closing chapter we would like to stress some of the key issues in the Hungarian labour market, together with some suggestions for possible solutions.

Low labour force participation

Probably the most crucial problem in the Hungarian labour market is low labour force participation and consequently low employment rates. This has several negative impacts on the whole economy: the employed population has to finance a considerable size of inactive population. This is only possible with a high level of redistribution, hence high taxation and social security contributions. However, this increases labour costs and consequently decreases investment, job creation and economic growth. From the social point of view, citizens outside the labour force receive either pensions or some type of social income, both of which indicate that they are located at the lower end of the income scale. Low labour force participation therefore also implies a higher incidence of poverty. A third negative consequence of low labour force participation is that if many people have been driven out of the labour market, they may look for jobs in the black economy.

On the basis of this analysis it is obvious that solving this problem requires a complex treatment including incentives for job creation by lowering payroll taxation, improving programmes targeting the long-term unemployed, channelling black economy activities into the legal sphere, and regional development policy.

High level of payroll taxation

The high level of payroll taxation drives people into the shadow economy in two ways. One of them is that high tax rates imply that tax evasion pays off more and is considered socially acceptable. The more indirect way is that the high tax rates mean higher labour costs and therefore lead to less job creation, so that potential employees have to leave the labour force and look for jobs in the illegal sector. Moreover, the Laffer-curve argument is probably also true for Hungary, that is, at lower taxation citizens are more willing to meet their tax duties.

Low labour force participation requires a high degree of redistribution, and thus tax and social security revenues cannot decrease in the near future. Consequently the rates can be lowered only if the tax-paying population increases, taxes are collected more efficiently and/or labour productivity increases. The first requires higher labour force participation, but one of the prerequisites for this is lower payroll taxation. The situation therefore seems to be a vicious circle. The other way out is to improve the efficiency of the tax collecting system, and important steps were made in this direction in 1999. However, there are no clear results yet on the quantitative impact of these measures. Also, stable economic growth may allow for a gradual decrease in the level of payroll taxation.

Large share of the shadow economy

The large share of the shadow economy is closely related to the two issues raised above. Some elements of the black economy - tax evasion, trade of agricultural products without receipts, and black employment - may be reduced by economy policies. The introduction of the temporary workers' certificate in agriculture together with tighter supervision has resulted in a decline in black employment. Farmers increasingly employ temporary workers officially. This evidence indicates that in this sector clear and simple legislation and tighter supervision would help to legalise currently shadow activities. However, in the long run a reduction of the payroll tax is necessary to fight the growing shadow economy, because in the current framework incentives to hide income are very high.

Long-term unemployed

If we look only at the time series of the Hungarian unemployment rate, we may conclude that since 1993 things have gone very well, since the unemployment rate has steadily decreased. However, at the same time, employment has not increased significantly until recent years, and therefore many unemployed persons have left the labour force. Another indication of this is the considerable discrepancy between ILO and registered unemployment.

The different causes of this phenomenon require different treatments. Disadvantageous geographical locations may be counteracted by mobility subsidies, though low-skilled people in general are less mobile and in Hungary there does not exist a sufficient rental housing market, which is a necessary condition for mobility. The low educational background may be offset by training and re-training programmes. As we saw from the impact studies, training increases the probability of future employment. However, we must add that these programmes are used mainly by younger generations, and obviously there is less scope for the training of older, low-skilled unemployed persons.

The negative attitude of employers towards the long-term unemployed may be altered by improvements in the communication channels between the labour market centres and the employers and in general by improving the counselling and labour exchange activities of the labour market centres. Another solution is to subsidise the employment of the (long-term) unemployed. As the impact study shows this does not necessarily help the unemployed to find permanent employment, although they do receive some wage gain. The reason for this is that (especially in the case of public relief work), these measures are used to obtain renewed eligibility for unemployment insurance. Although there are no available figures on the impact of public works projects, since this programme has similar characteristics from the incentive point of view, we can expect a similar impact as in the case of public relief work.

Regional disparities

Regional inequalities in Hungary have a very complex pattern. The most backward regions can be found in the north-east of Hungary, along the eastern border, and in the south-west. All of them are characterised by a disadvantageous industrial structure, either agriculture or heavy industry play (or played) an important role in the region. Moreover, they are both far from Budapest and from the Austrian border and are equipped with a low quality infrastructure, particularly in transportation. The average educational background is also somewhat lower in these regions. Additionally, the majority of the Hungarian Romany population lives in these regions. Finally, mainly because of the above reasons, they have been less successful than other regions in attracting new foreign and domestic investment, which has widened the gap between them and the more developed central and north-western regions.

In consequence, labour force participation is lower in these regions, unemployment is higher, there is less job creation and wages are somewhat lower too. However, as the discussion of the previous paragraph indicates it is obvious that these labour market issues have to be solved within the framework of a more complex regional policy. Otherwise, any policy may be just a waste of resources.

Regional policy, which is a major focus of the integrated European policy, does not have a strong tradition in Hungary and therefore, at least on the regional level, qualified staff is missing. Moreover, it requires stronger co-operation between different ministries, which is not usual either. The framework for this co-operation at the central and particularly at the regional level should be developed soon, also because it is needed for co-operation with EU organisations.

The labour market position of the Romany minority

In Hungary the Romany minority constitutes about 5 % of the total population. They have the most disadvantageous status in the Hungarian labour market, which is characterised by extremely low labour force participation, high unemployment, a very low educational background, a poor geographical location and high fertility.

Moreover, Romany pupils perform much worse in schools than the Hungarian average. Therefore Romany pupils are inheriting the low educational background and consequently the rather difficult labour market situation of their parents.

It is very difficult to find a cure for the problems of the Romany minority, because their educational background is extremely low, and there is very low demand for unskilled workers, in particular in the regions where Romanies are over-represented. Since many of them live in villages in agricultural areas, one possibility would be to support their agricultural involvement by giving them land. However, traditionally they are not much involved in farming, they lack farming skills, and most importantly, agriculture is in crisis in most of these regions, which makes it very difficult to live on agricultural activities. It would also be an advantage to support their mobility towards the western regions, but in general they cannot afford housing there and also, especially in villages, there is aversion against Romanies moving in. There are also plans to implement some positive discrimination schemes for the Romany population, which may be useful to increase their labour force participation and decrease their unemployment at the same time.

However, the most important problem in our view is the education of Romany children. Since Romany family sizes are much bigger than average, the proportion of Romany pupils exceeds the 5 % share of Romanies in the total population, and if there are no improvements in their education

they will enter the labour market with practically no chance of obtaining a job. Programmes should therefore be developed to improve their educational records.

Increasing wage gap between the private and public sector

In Hungary one of the most striking development in the structure of wages is the increasing earnings gap between the private and public sector (public administration, health care, education). This is particularly true in the case of employees with college or university degree. This has several negative consequences, the most important one is that the well-qualified leave the public sector and the best graduates do not enter it. This results in the deteriorating quality of this sector. It is especially important in the educational sector because it is known that human capital is one of the most important factor in economic growth. On the other hand in public education there is excess supply of teachers, therefore salary improvements may be financed by layoffs, however there are strong movements against teacher layoffs and school closures, despite the fact of the demographic decline. On the other hand in higher education without significant improvements in salaries universities cannot keep their qualified (particularly) young professors.

In the health sector too, the necessary increase in salaries should be combined with a general reform of the sector.

These key problems need to be solved. Since the solution of these problems is at least partly necessary for accession, it is in the best interest of the Hungarian government to make every effort to address them. Also, Hungary could use the help, both financial and in terms of expertise, of the ESF.

10. Bibliography

Ábrahám, Á and G.Kertesi, (1998), "Regional Unemployment Rate Differentials in Hungary 1990-1995, in: *Hungary: Towards a Market Economy*, eds.: L. Halpern and Ch. Wyplosz, Cambridge University Press

Ábrahám, Á. and G. Kézdi, (1998), "Employment and Wages in Panel", *KTI Mûhelytanulmányok* , forthcoming (in Hungarian)

Annual Report 1997, Hungarian National Bank

Árvay, J. and A. Vértes, (1994), "To hide, that can be hidden ...", *Figyelô*, 24 February, (in Hungarian)

Boeri, T; M.C. Burda and J. Köllõ, (1998), "Mediating the Transition: Labour Markets in Central and Eastern Europe", *Forum Report of the Economic Policy Initiative* no. 4

Boeri,T and Gy. Pulay, (1998), "Labor-Market Policy Reforms and the Fiscal Constraint", in: *Public Finance Reform in Transition - The Experience of Hungary*, eds.: Bokros, L. and J.J. Dethier, The World Bank, Washington D.C.

Csaba, I. and A. Semjén, (1998), "Welfare Institutions and the Transition: in Search of Efficiency and Equity", in: *Hungary: Towards a Market Economy*, eds.: L. Halpern and Ch. Wyplosz, Cambridge University Press

Fazekas, K. and G. Gorzelak, (1995), "Restructuring and the Labour Market in Regions Dominated by Heavy Industry in Central and Eastern Europe", *The Regional Dimensions of Unemployment in Transition Countries*, Paris, OECD/CCET

Herczog, L., G. Kézdi and B. Nunberg, (1998), "Wages and Employment in the Public Sector" in: *Public Finance Reform in Transition - The Experience of Hungary*, eds.: Bokros, L. and J.J. Dethier, The World Bank, Washington D.C.

Horváth, R, (1996), "Gender Specific Wage Differentials in Hungary", *mimeo*, Budapest (in Hungarian)

Hungary, Employment and Sustainable Livelihoods, (1997), ILO, Central and Eastern European Team, Budapest, January 1997

Kertesi, G, (1994), "The Labour Market Situation of the Roma Minority in Hungary", *mimeo*, Budapest (in Hungarian).

Kertesi, G. and G Kezdi, (1999), The Romany Population in Hungary. Documentation and Data Archive, Budapest, Socio-Type.

Kertesi, G and J. Köllõ, (1995), "Wages and Unemployment in Hungary 1986-1994", *ILO-Japan Project*, ILO, Budapest

Kertesi, G and J. Köllõ, (1999a), "Unemployment, Wage Push and Wage Competitiveness of Regions -The case of Hungary under Economic Transition", *Budapest Working Papers on the Labour Market*, Labour Research Centre, Institute of Economics, Hungarian Academy of Sciences, Budapest, (forthcoming)

Kertesi, G and J. Köllõ, (1999b), "The Revaluation of Human Capital in Hungary (1986-1996)", *Budapest Working Papers on the Labour Market*, Labour Research Centre, Institute of Economics, Hungarian Academy of Sciences, Budapest, (forthcoming)

Kézdi, G, (1996), "Ideas Before the State Budget Reform. The Changes of Income Tax Burdens in Hungary 1989-1994", *Pénzügyi Szemle*, 1 (in Hungarian)

Kézdi, G, (1999), "Secondary school enrolment of Roma Youngsters", in: *Gypsies in Hungary*, de.: F. Glatz, Hungarian Academy of sciences, Budapest (in Hungarian)

Koltay, J, (1998), "The Minimum Wage in Hungary: Subsistence Minimum and/or Bargaining Tool?", in: *Hungary: Towards a Market Economy*, eds.: L. Halpern and Ch. Wyplosz, Cambridge University Press

Köllõ, J. and Gy. Nagy, (1996), "Earnings Gains and Losses from Insured Unemployment in Hungary", *Labour Economics*, 3

Labour Force Survey 1992-1997 (Time Series), (1998), Central Statistical Office, Budapest

Labour Force Survey 3rd Quarter 1998 (Quarterly Bulletin), (1998), Central Statistical Office, Budapest

Long Term Unemployment (Based on Labour Force Survey data) 1992-1997, (1998), Central Statistical Office, Budapest

Micklewright, J. and Gy. Nagy, (1995), "Unemployment Insurance and Incentives in Hungary", *CEPR Discussion Paper*, 1118

Micklewright, J. and Gy. Nagy, (1996), "Labour Market Policy and the Unemployed in Hungary", *European economic Review*, 40 (3-5)

Micklewright, J. and Gy. Nagy, (1998), "The Implications of Exhausting Unemployment Insurance Entitlement in Hungary", *Budapest Working Papers on the Labour Market No.1998/2*, Labour Research Centre, Institute of Economics, Hungarian Academy of Sciences, Budapest,

Lackó, M., (1998), "The Hidden economies of Visegrád Countries in International Comparison: a Household Electricity Approach", in: *Hungary: Towards a Market Economy*, eds.: L. Halpern and Ch. Wyplosz, Cambridge University Press

Monthly Reports 1998, Central statistical Office

Monthly Reports 1998, Hungarian National Bank

Munkaerôpiaci Információk 1998/8, (1998), Országos Munkaügyi Módszertani Központ, (Labour Market Information)

O'Leary C.J., (1997), "Preliminary Evidence on Active Labor Programs' Impacts in Hungary and Poland", *Working Paper Number 113*, The William Davidson Institue, Ann Arbour, Michigan

Palacios, R. and R. Rocha, (1998), "The Hungarian Pension System in Transition", in: *Public Finance Reform in Transition - The Experience of Hungary*, eds.: Bokros, L. and J.J. Dethier, The World Bank, Washington D.C.

Paukert, L., (1994), "Women's unemployment in East-Central European Countries During the Period of Transition to a Market Economy System", ILO, Geneva

Szívós, P. and I. Gy. Tóth, (1998), "Welfare benefits and poverty in Hungary, 1992-1997", TÁRKI *Társadalompolitikai Tanulmányok No. 5.*, (in Hungarian)

Vámosi-Nagy, Sz., I. Kocsis and L.A. Sanchez, (1998), "Tax-Policy Reforms in Hungary", in: *Public Finance Reform in Transition - The Experience of Hungary*, eds.: Bokros, L. and J.J. Dethier, The World Bank, Washington D.C.

Varga, J., (1997), "On Tuition Fees and Student Loans in Higher Education in Hungary", *Acta Oeconomica*, forthcoming

Wolff J., (1997), "Unemployment Benefits and Incentives in Hungary: New Evidence", *Working Paper Number 111*, The William Davidson Institute, Ann Arbour, Michigan

11. Sources consulted

Data sources

- Labour Force Survey of the Central Statistical Office of Hungary: quarterly data between 1992 and 1998 on a representative sample of around 60 000 observations. The database contains data on employment, unemployment and duration of unemployment according to the standard ILO definitions, besides the basic demographic information. The database is pertinent for deriving statistics on sectoral, occupational and regional levels.
- Wage/Salary Tariff Survey of the National Labour Centre: yearly data for 1986, 1989, 1992, 1994-1998 on a sample of between 100 000 and 200 000. The database contains extremely reliable information on wages and salaries, drawn directly from enterprises and employers. This database is pertinent for analysing wages and salaries according to gender, occupation, etc. From 1995 on we have data only for private organisations with at least 10 employees and public employers regardless of the number of employees. After 1998 we have data only for private organisations with at least 5 employees and public employers regardless of the number of employees.
- Unemployment Register of the National Labour Centre: monthly data (gender, education duration) on the registered unemployed by regional labour centres. Continuous since 1990.
- Population Census: The most accurate source of population statistics, since it is exhaustive. Latest survey in 1990.
- Population register: The only source of population statistics between two censuses. The 1989 data are wrong and cannot be used.
- Micro-census: Survey of 2% of the population. Statistics on education and employment can be derived from this. Latest survey in 1996.

Interviews

Mr László Hercog, Deputy State Secretary, Ministry of Economy

Mr László Tóth, Department Director, Ministry of Family and Social Affairs

Annex A: Additional tables

Table A.1 Average monthly net earnings of employees, February 1999

	Average earnings, (HUF/person)*	Average earnings, relative to national average (%)	Nominal wage growth, (%)	Nominal wage growth relative to average growth (%)
Agriculture, fishing	32 058	71.7	7.7	74.7
Mining and quarrying	50 857	113.8	13.9	134.9
Manufacturing	43 942	98.3	9.8	95.1
Of which:				
15-16 food	42 342	94.7	9.6	93.2
17-19 textiles-, and cloths	30 577	68.4	8.9	86.5
23-25 chemical products	61 867	138.4	15.9	154.4
29-35 machinery	48 408	108.3	10.8	104.8
Electricity, gas, steam and water supply	54 650	122.2	9.3	90.3
Industry total	45 069	100.8	9.6	93.2
Construction	33 609	75.2	9.1	88.3
Trade	40 397	90.4	8.5	82.5
Hotels and restaurants	32 330	72.3	14.0	135.9
Transport, storage and communication	49 039	109.7	10.2	99.1
Financial intermediation	93 733	209.7	12.4	120.4
Real estate, renting and business activities	50 724	113.5	16.9	164.1
Public administration and defence	49 901	116.6	9.7	94.1
Education	45 490	101.8	18.1	175.7
Health	37 138	83.1	8.1	78.6
Other services	42 014	94.2	9.4	91.3
National economy, total Of which:	44 689	100.0	10.3	100.0
■ non-public	44 646	99.9	9.4	91.3
■ Public	44 765	100.2	11.9	115.6

Source: CSO

** Data of enterprises employing more than 4 (before 1999 at least 10) persons and all budgetary organisations. Indexes concern comparable data.*

Table A.2 Social expenditure and revenue, 1989-1995, (in % of GDP)

	1989	1990	1991	1992	1993	1994	1995
Expenditures							
Pensions	9.0	9.7	10.2	10.4	10.3	10.8	9.9
Sickness benefits	1.5	1.4	1.4	1.3	1.4	1.3	1.1
Family benefits*	4.4	4.6	4.5	3.9	3.7	3.2	2.4
Unemployment benefits	-	-	0.8	2.2	2.2	1.5	1.6
Social assistance (local)	-	-	-	0.5	0.8	0.7	0.5
Other cash benefits	0.4	0.4	0.4	0.4	0.6	0.5	0.4
Total cash benefits	15.4	16.2	17.3	18.8	19.0	17.9	16.0
Active employment measures	-	-	0.3	0.6	0.6	0.6	0.4
Health care and social benefits in kind	5.1	5.8	6.6	7.1	7.2	7.4	6.6
Consumption and housing subsidies	7.9	6.8	5.4	4.1	3.0	2.6	2.7
Tax social benefits	0.3	0.3	0.5	0.3	0.2	0.2	n.a.
Total social expenditures	28.6	29.1	30.2	30.8	30.0	28.6	25.7
Revenues							
Social insurance contributions	n.a.	17.0	16.3	15.7	15.3	14.8	13.7
Other revenues	n.a.	12.1	13.8	15.0	14.7	13.8	12.0

** family supplement, maternity allowance, and maternity benefit*
Source: Ministry of Labour (1998)

Table A.3 Employment rate by age group, both gender (1992-1998) (%)

	1992	1993	1994	1995	1996	1997	1998 *
15-74	52.8	49.3	48.2	47.0	46.7	46.7	47.9
15-59	62.4	58.9	58.0	56.9	56.6	56.5	57.7
15-24	37.3	33.5	32.9	31.3	30.4	31.4	35.2
25-39	75.8	72.8	72.3	70.8	70.5	70.2	71.3
40-59	65.8	62.5	61.5	61.3	61.6	61.4	61.1
60-74	9.8	7.1	6.0	5.0	4.4	3.9	4.0

Source: CSO LFS.
** 3rd quarter 1998.*

Table A.4 Employment rate by age group, male (1992-1998) (%)

	1992	1993	1994	1995	1996	1997	1998 *
15-74	59.6	55.6	55.1	54.7	54.5	54.6	55.3
15-59	68.5	64.4	64.2	64.0	64.1	64.0	64.4
15-24	40.7	36.6	36.1	35.3	35.4	36.2	39.6
25-39	83.3	80.6	80.8	81.0	81.4	81.7	81.5
40-59	72.6	68.2	68.1	68.3	68.3	68.2	67.0
60-74	13.0	9.9	8.4	7.6	6.0	5.5	6.0

Source: CSO LFS.
** 3rd quarter 1998.*

Table A.5 Employment rate by age group, female (1992-1998) (%)

	1992	1993	1994	1995	1996	1997	1998 *
15-74	46.6	43.5	41.9	40.0	39.6	39.5	41.1
15-59	56.5	53.5	51.9	49.9	49.3	49.2	51.1
15-24	33.6	30.3	29.5	27.0	25.2	26.2	30.5
25-39	68.1	65.0	63.7	60.4	59.5	58.6	60.8
40-59	59.6	57.3	55.4	55.0	55.4	55.3	55.7
60-74	7.5	5.0	4.2	3.2	3.2	2.8	2.5

Source: CSO LFS.
** 3rd quarter 1998.*

Table A.6 Number of employed by sector 1992-1998, both sexes (thousand)

	1992	1993	1994	1995	1996	1997	1998 *
Agriculture	460.1	349.7	327.6	295.1	302.4	287.8	288.9
Mining and quarrying	52.7	42.2	39.2	34.0	32.8	27.2	24.8
Manufacturing	1053.5	937.8	888.8	850.2	850.8	864.1	902.5
Electricity, gas, steam and water supply	108.0	105.1	108.3	96.6	88.8	97.4	94.6
Construction	216.8	207.1	201.0	217.3	217.7	219.2	237.9
Total industry	1431	1292.2	1237.3	1198.1	1190.1	1207.9	1259.8
Trade	480.4	469.5	467.4	459.9	486.9	496.8	472.6
Hotels and restaurants	115.6	110.4	110.6	116.6	114.1	120.9	122.0
Transport, storage	346.4	336.3	314.5	319.6	321.2	310.0	304.1
Financial intermediation	68.7	72.6	72.9	82.2	83.3	83.3	82.5
Real estate, renting	140.3	137.6	125.6	130.6	128.2	146.3	164.7
Public administration and defence	293.7	299.5	320.2	318.1	306.6	293.8	303.6
Education	311.8	342.8	338.6	335.4	319.6	296.9	301.5
Health and social work	236.3	241.6	239.0	231.4	225.6	232.1	239.0
Other services	198.4	175.4	197.8	191.8	170.1	170.5	177.3
Total services	2191.6	2185.7	2186.6	2185.6	2155.6	2150.6	2167.3
Total	4082.7	3827.3	3751.5	3678.8	3648.1	3646.3	3716.3

Source: CSO LFS.
** The sample of the Labour Force Survey (LFS) has been broadened from 1998, so data are not fully compatible with last survey outcomes. 3rd quarter of 1998.*

Table A.7 Number of employed by sector 1992-1998, male (thousand)

	1992	1993	1994	1995	1996	1997	1998 *
Agriculture	316.7	246.1	235.0	219.2	229.1	216.5	217.4
Mining and quarrying	45.5	35.4	34.6	28.8	27.4	23.9	21.2
Manufacturing	590.6	532.8	510.4	498.1	496.6	511.3	528.7
Electricity, gas, steam and water supply	76.6	74.5	77.2	71.8	65.5	72.2	71.0
Construction	184.3	183.2	178.8	195.7	196.1	200.3	219.4
Total industry	897	825.9	801	794.4	785.6	807.7	840.3
Trade	200.7	194.2	202.2	208.1	235.5	241.4	221.9
Hotels and restaurants	48.7	48.7	52.5	52.3	52.4	59.6	57.0
Transport, storage	243.0	242.6	229.2	238.1	235.0	228.4	218.4
Financial intermediation	16.5	18.6	18.9	23.6	24.9	28.1	26.5
Real estate, renting	68.4	72.2	67.5	68.6	66.9	77.9	91.8
Public administration and defence	191.8	193.6	202.1	201.4	184.1	168.3	166.9
Education	75.4	84.3	83.8	85.5	78.7	70.9	72.6
Health and social work	58.9	62.1	57.7	56.2	55.6	57.4	58.1
Other services	101.1	89.0	105.1	102.2	88.5	87.3	87.2
Total services	1004.5	1005.3	1019	1036	1021.6	1019.3	1000.4
Total	2218.2	2077.3	2055.0	2049.6	2036.3	2043.5	2058.3

Source: CSO LFS.
** The sample of the Labour Force Survey (LFS) has been broadened from 1998, so data are not fully compatible with last survey outcomes. 3rd quarter of 1998.*

Table A.8 Number of employed by sector 1992-1998, female (thousand)

	1992	1993	1994	1995	1996	1997	1998 *
Agriculture	460.1	349.7	327.6	295.1	302.4	287.8	288.9
Mining and quarrying	52.7	42.2	39.2	34.0	32.8	27.2	24.8
Manufacturing	1053.5	937.8	888.8	850.2	850.8	864.1	902.5
Electricity, gas, steam and water supply	108.0	105.1	108.3	96.6	88.8	97.4	94.6
Construction	216.8	207.1	201.0	217.3	217.7	219.2	237.9
Total industry	1431	1292.2	1237.3	1198.1	1190.1	1207.9	1259.8
Trade	480.4	469.5	467.4	459.9	486.9	496.8	472.6
Hotels and restaurants	115.6	110.4	110.6	116.6	114.1	120.9	122.0
Transport, storage	346.4	336.3	314.5	319.6	321.2	310.0	304.1
Financial intermediation	68.7	72.6	72.9	82.2	83.3	83.3	82.5
Real estate, renting	140.3	137.6	125.6	130.6	128.2	146.3	164.7
Public administration and defence	293.7	299.5	320.2	318.1	306.6	293.8	303.6
Education	311.8	342.8	338.6	335.4	319.6	296.9	301.5
Health and social work	236.3	241.6	239.0	231.4	225.6	232.1	239.0
Other services	198.4	175.4	197.8	191.8	170.1	170.5	177.3
Total services	2191.6	2185.7	2186.6	2185.6	2155.6	2150.6	2167.3
Total	4082.7	3827.3	3751.5	3678.8	3648.1	3646.3	3716.0

Source: CSO LFS.
** The sample of the Labour Force Survey (LFS) has been broadened from 1998, so data are not fully compatible with last survey outcomes. 3rd quarter of 1998.*

Table A.9 Employment by region 1992-1998, (thousand)

region	1992	1993	1994	1995	1996	1997	1998 1
R1: Central Hungary	1277.1	1208.4	1177	1172.1	1136.4	1128.1	1135.1
R2: Central Transdanubia	442.4	421.3	415.5	407.4	406.8	412.9	430.6
R3: Western Transdanubia	419.7	407.9	406.4	397.7	403.2	406.4	412.9
R4: Southern Transdanubia	397	364.5	360.6	334.7	342.5	338.5	347.3
R5: Northern Hungary	462.1	432.8	315.6	402.2	399.3	397.8	395.3
R6: Northern Great Plain	541.1	495.8	487.2	474.7	473.5	468.4	478
R7: Southern Great Plain	543.4	496.6	489.2	490.1	486.4	494.2	494.1
Total	4082.8	3827.3	3651.5	3678.9	3648.1	3646.3	3693.3

Source: CSO LFS.
1 1 The sample of the Labour Force Survey (LFS) has been broadened from 1998, so data are not fully compatible with last survey outcomes. 3rd quarter 1998. 3rd quarter 1998.

Table A.10 Employed persons by educational attainment 1992-1998 (thousand)

year	unfinished primary school	finished primary school	apprentice or vocational school	grammar or other secondary school	college or university degree	Total 1
1992	142.1	1029.4	1078.1	1192.2	583.9	4025.7
1993	79.9	949.6	1044.4	1135.9	560.5	3770.3
1994	59.3	871.2	1091.6	1128.1	542.3	3692.5
1995	47.7	809.5	1094.5	1112.1	559.0	3622.8
1996	42.6	772.0	1126.9	1105.7	585.7	3605.1
1997	34.3	770.9	1119.6	1140.0	545.5	3610.3
1998 *	31.1	781.4	1133.5	1156.1	591.2	3693.3

Source: CSO LFS
** The sample of the Labour Force Survey (LFS) has been broadened from 1998, so data are not fully compatible with last survey outcomes. Q3 1998.*
[1] In the official CSO publications these figures do not coincide with the number of total employed. Since the difference is not explained we have to use these figures without fully understanding them.

Table A.11 Labour force participation rate of the working age (15-74) population by age group, 1992-1998, both sexes (%)

	1992	1993	1994	1995	1996	1997	1998 *
15-74	58.6	56.0	54.0	52.4	51.8	51.2	51.8
15-59	69.4	66.9	64.9	63.4	62.8	62.0	62.4
15-24	45.2	42.6	40.8	38.4	37.1	37.3	40.6
25-39	84.1	82.4	80.7	78.7	78.1	76.8	77.0
40-59	70.9	68.7	66.7	66.3	66.6	65.8	64.7
60-74	10.3	7.9	6.7	5.3	4.6	4.2	4.4

Source: CSO LFS.
** 3rd quarter of 1998.*

Table A.12 Labour force participation rate of the working age (15-74) population by age group, 1992-1998, both sexes (%)

year	15-19	20-24	25-29	30-39	40-54	55-59	60-74	15-74
1992	23.0	71.1	77.6	86.6	81.7	34.3	10.3	58.6
1993	20.8	68.5	76.0	84.9	79.4	30.9	7.9	56.0
1994	19.1	66.1	75.7	82.8	77.5	27.4	6.7	54.0
1995	16.8	64.4	73.0	81.3	76.5	28.2	5.3	52.4
1996	15.3	61.3	72.4	81.0	76.2	29.2	4.6	51.8
1997	14.2	59.7	71.9	79.4	75.2	28.7	4.2	51.2
1998 *	15.6	61.1	73.0	79.3	74.5	26.1	4.4	51.8

Source: CSO LFS.
** 3rd quarter of 1998.*

Table A.13 Labour force participation rate of the working age (15-74) population by age group, 1992-1998, male (%)

	1992	1993	1994	1995	1996	1997	1998 *
15-74	66.7	64.0	62.4	61.7	61.1	60.3	60.3
15-59	76.9	74.4	72.8	72.3	71.8	70.8	70.2
15-24	50.5	47.9	46.0	44.6	43.7	43.6	46.3
25-39	93.2	91.8	90.8	90.9	90.8	89.7	88.4
40-59	78.9	76.2	74.9	74.7	74.5	73.6	71.4
60-74	13.5	10.6	9.0	8.0	6.2	5.8	6.6

Source: CSO LFS.
** 3rd quarter of 1998.*

Table A.14 Labour force participation rate of the working age (15-74) population by age group, 1992-1998, male (%)

year	15-19	20-24	25-29	30-39	40-54	55-59	60-74	15-74
1992	24.4	81.0	92.7	93.4	86.3	52.0	13.5	66.7
1993	21.7	79.2	91.6	91.9	83.7	47.8	10.6	64.0
1994	20.5	75.1	91.5	90.5	82.8	44.1	9.0	62.4
1995	19.4	74.9	91.3	90.7	82.1	44.9	8.0	61.7
1996	17.6	72.9	90.7	90.8	81.2	46.1	6.2	61.1
1997	16.5	69.5	90.4	89.3	80.5	44.2	5.8	60.4
1998 *	17.6	69.8	88.3	88.4	78.8	40.0	6.6	60.3

Source: CSO LFS.
** 3rd quarter of 1998.*

Table A.15 Labour force participation rate of the working age (15-74) population by age group, 1992-1998, female (%)

	1992	1993	1994	1995	1996	1997	1998 *
15-74	51.0	48.5	46.3	43.8	43.4	42.8	44.0
15-59	62.0	59.6	57.2	54.7	54.1	53.3	54.7
15-24	39.6	37.0	35.3	31.9	30.2	30.7	34.6
25-39	75.0	72.8	70.5	66.5	65.4	63.7	65.3
40-59	63.7	61.8	59.2	58.6	59.3	58.6	58.5
60-74	7.9	5.8	5.0	3.4	3.5	3.0	2.8

Source: CSO LFS.
** 3rd quarter of 1998.*

Table A.16 Labour force participation rate of the working age (15-74) population by age group, 1992-1998, female (%)

year	15-19	20-24	25-29	30-39	40-54	55-59	60-74	15-74
1992	21.5	60.6	62.1	79.9	77.3	19.3	7.9	51.0
1993	19.8	57.4	59.8	77.8	75.3	16.8	5.8	48.5
1994	17.6	56.5	59.7	75.0	72.5	13.8	5.0	46.3
1995	14.1	53.4	54.3	71.9	71.2	14.7	3.4	43.8
1996	12.9	49.3	53.5	71.1	71.4	15.5	3.5	43.4
1997	11.8	49.2	52.9	69.3	70.2	16.2	3.0	42.8
1998 *	13.6	51.9	57.2	70.1	70.4	14.7	2.8	44.0

Source: CSO LFS.
** 3rd quarter of 1998.*

Table A.17 Unemployment rate by age group, both gender (1992-1998) (%)

	1992	1993	1994	1995	1996	1997	1998 *
15-74	9.8	11.9	10.7	10.2	9.9	8.7	7.5
15-59	10.0	12.0	10.7	10.3	10.0	8.8	7.5
15-24	17.5	21.3	19.4	18.6	18.0	15.9	13.3
25-39	9.9	11.6	10.5	10.1	9.8	8.5	7.4
40-59	7.3	9.0	7.8	7.5	7.5	6.6	5.5
60-74	4.3	10.1	10.5	5.1	5.4	6.2	9.3

Source: CSO LFS.
** 3rd quarter 1998.*

Table A.18 Unemployment rate by age group, both gender (1992-1998) (%)

year	15-19	20-24	25-29	30-39	40-54	55-59	60-74	Total
1992	27.0	14.0	11.7	9.3	7.4	6.2	4.3	9.8
1993	33.3	17.0	13.0	11.1	9.0	8.9	10.1	11.9
1994	29.8	16.0	11.3	10.1	8.0	6.4	10.5	10.7
1995	31.1	14.7	10.6	9.9	7.7	5.8	5.1	10.2
1996	30.4	14.5	11.3	9.1	7.6	6.1	5.4	9.9
1997	28.8	13.0	9.1	8.2	6.6	6.6	6.2	8.7
1998 *	26.0	10.6	8.4	6.9	5.7	4.0	9.3	7.5

Source: CSO LFS.
** 3rd quarter 1998.*

Table A.19 Unemployment rate by age group, female (1992-1998) (%)

	1992	1993	1994	1995	1996	1997	1998 *
15-74	8.7	10.4	9.4	8.7	8.8	7.8	6.7
15-59	8.9	10.3	9.3	8.7	8.9	7.8	6.6
15-24	15.1	18.2	16.6	15.6	16.4	14.5	11.6
25-39	9.1	10.7	9.7	9.2	9.1	7.9	6.9
40-59	6.5	7.3	6.4	6.3	6.6	5.7	4.9
60-74	4.9	14.2	14.9	6.1	7.9	7.7	10.3

Source: CSO LFS.
** 3rd quarter 1998.*

Table A.20 Unemployment rate by age group, female (1992-1998) (%)

year	15-19	20-24	25-29	30-39	40-54	55-59	60-74	Total
1992	25.4	10.9	11.4	8.5	6.5	5.7	4.9	8.7
1993	30.3	13.3	13.3	9.9	7.2	9.3	14.2	10.4
1994	26.8	12.8	10.9	9.4	6.5	4.4	14.9	9.4
1995	28.0	11.7	9.7	9.0	6.3	5.5	6.1	8.7
1996	28.8	12.8	11.9	8.0	6.7	4.8	7.9	8.8
1997	29.3	11.0	8.5	7.7	5.8	4.8	7.7	7.8
1998 *	25.3	8.6	8.3	11.8	4.9	3.5	10.3	6.7

Source: CSO LFS.
** 3rd quarter 1998.*

Table A.21 Unemployment rate by age group, male (1992-1998) (%)

	1992	1993	1994	1995	1996	1997	1998 *
15-74	10.7	13.2	11.8	11.3	10.7	9.5	8.2
15-59	10.9	13.4	11.9	11.5	10.8	9.6	8.2
15-24	19.3	23.6	21.5	20.7	19.0	16.9	14.5
25-39	10.6	12.3	11.0	10.8	10.3	9.0	7.8
40-59	8.0	10.4	9.0	8.5	8.3	7.4	6.1
60-74	4.0	7.0	7.1	4.5	3.4	5.1	8.6

Source: CSO LFS.
** 3rd quarter 1998.*

Table A.22 Unemployment rate by age group, male (1992-1998) (%)

year	15-19	20-24	25-29	30-39	40-54	55-59	60-74	Total
1992	28.2	16.2	11.8	10.1	8.3	6.4	4.0	10.7
1993	35.8	19.6	12.8	12.1	10.7	8.7	7.0	13.2
1994	32.2	18.2	11.6	10.8	9.3	7.1	7.1	11.8
1995	33.3	16.8	11.0	10.7	8.9	5.9	4.5	11.3
1996	31.5	15.7	10.9	10.0	8.5	6.6	3.4	10.7
1997	28.4	14.3	9.5	8.7	7.4	7.3	5.1	9.5
1998 *	26.5	12.1	8.4	7.3	6.4	4.3	8.6	8.2

Source: CSO LFS.
** 3rd quarter 1998.*

Table A.23 Unemployed persons by ISCO-88 major groups* of their previous employment 1994-1998 (thousand)

year	1	2	3	4	5	6	7	8	9	0	Total
1994	10.4	9.7	26.8	31.0	48.5	15.4	114.5	49.5	64.9	0.8	451.2
1995	7.9	9.0	25.8	23.9	49.3	16.0	108.6	42.9	64.6	1.1	416.5
1996	6.0	8.7	27.0	20.2	50.9	14.6	100.2	40.2	66.3	1.4	400.1
1997	5.9	6.3	16.9	16.9	41.9	14.0	86.8	38.3	54.6	1.4	348.8
1998 1	3.9	6.0	18	18	32.2	9.2	67.8	30.4	46.5	0.4	302.8

Source: CSO LFS

* *1. Legislators, senior officials and managers*
2. Professionals
3. Technicians and associate professionals
4. Clerks
5. Service workers and shop and market sales workers
6. Skilled agricultural and forestry workers
7. Craft and related workers
8. Plant and machine operators and assemblers
9. Elementary occupations
0. Armed forces

[1] *The sample of the Labour Force Survey (LFS) has been broadened from 1998, so data are not fully compatible with last survey outcomes.*

Table A.24 Unemployed persons by educational attainment 1992-1998 (thousand)

year	unfinished primary school	Finished primary school	apprentice or vocational school	grammar or other secondary school	college or university degree	Total
1992	30.2	166.2	141.4	90.5	15.9	444.2
1993	30.1	186.1	174.8	110.3	17.6	518.9
1994	20.2	160.6	158.1	95.2	17.1	451.2
1995	16.9	145.3	152.8	84.5	17	416.5
1996	19.6	131.7	146.2	86.1	16.5	400.1
1997	15.4	127.4	124.8	71.3	9.9	348.8
1998 *	12.8	103.7	102.1	72.5	11.7	302.8

Source: CSO LFS

* *The sample of the Labour Force Survey (LFS) has been broadened from 1998, so data are not fully compatible with last survey outcomes. Q3 1998.*

Table A.25 Vacancies by region July 1998

Region	Skilled	Semi-skilled	Unskilled	Total blue collar	White collar	Total
R1: Central Hungary	7800	3824	1955	13579	1246	14825
R2: Central Transdanubia	3891	3004	559	7454	745	8199
R3: Western Transdanubia	1211	1564	367	3142	285	3427
R4: Southern Transdanubia	640	859	527	2026	366	2392
R5: Northern Hungary	2801	2550	1812	7163	634	7797
R6: Northern Great Plain	2875	3417	2187	8479	834	9313
R7: Southern Great Plain	2468	2541	1029	6038	881	6919
Total	21686	17759	8436	47881	4991	52872

Source: National Labour Centre

Table A.26 Registered unemployed by region July 1998

Region	Skilled	Semi-skilled	Unskilled	Total blue collar	White collar	Total
R1: Central Hungary	18383	16759	9081	44223	16414	60637
R2: Central Transdanubia	13872	11455	7057	32384	8316	40700
R3: Western Transdanubia	9521	7749	4709	21979	6069	28048
R4: Southern Transdanubia	17053	11283	11137	39473	7896	47369
R5: Northern Hungary	32535	17740	20558	70833	12962	83795
R6: Northern Great Plain	32816	23055	20351	76222	13889	90111
R7: Southern Great Plain	21571	13876	11711	47158	11927	59085
Total	145751	101917	84604	332272	77473	409745

Source: National Labour Centre

Table A.27 Number of unemployed receiving active or passive measures

	1997 July	1998 July	% change
Registered unemployed	468 713	409 745	-12.6
Unemployment rate	10.5	9.2	-1.3
Receiving unemployment benefit	142 132	121 607	-14.4
as a proportion of registered unemployed	30.3	29.7	-0.6
average amount received	15 397	18 201	+18.2
Receiving income support	203 358	179 831	-11.6
as a proportion of registered unemployed	43.4	43.9	+0.5
Income support is suspended	54244	107217	+97.7
as a proportion of registered unemployed	11.6	26.2	+14.6
Active measures			
Training for unemployed	22 981	25 463	+10.8
Preventive training for employed	1 829	1 285	-29.7
Subsidies for business start-ups	1 795	1 955	+8.9
Employment subsidies for long-run Unemployed	28 836	29 470	+2.2
Public relief work	42 467	43 614	+2.7
Early retirement	2 939	1 499	-49.9
Mobility subsidies (travel allowance)	3 019	3 09	+9.6
Paying social security contributions	-	688	-
Subsidising self-employment	-	2 061	-
Subsidising employers to avoid layoffs	-	1 356	-
Subsidy for part-time employment	-	226	-
.Subsidy for employing Romas	-	22	-
Measures for job market entrants			
Employment subsidies	2584	1155	-55.3
On-the-job training subsidies	4068	10581	+160.1
Other measures			
Civil service	3494	4238	+21.3
Pre-retirement	65647	61708	-6.0

Source: National Labour Centre (1998)

Table A.28 The Structure of the Economic Council (previously the National Council for Reconciliation of Interest)

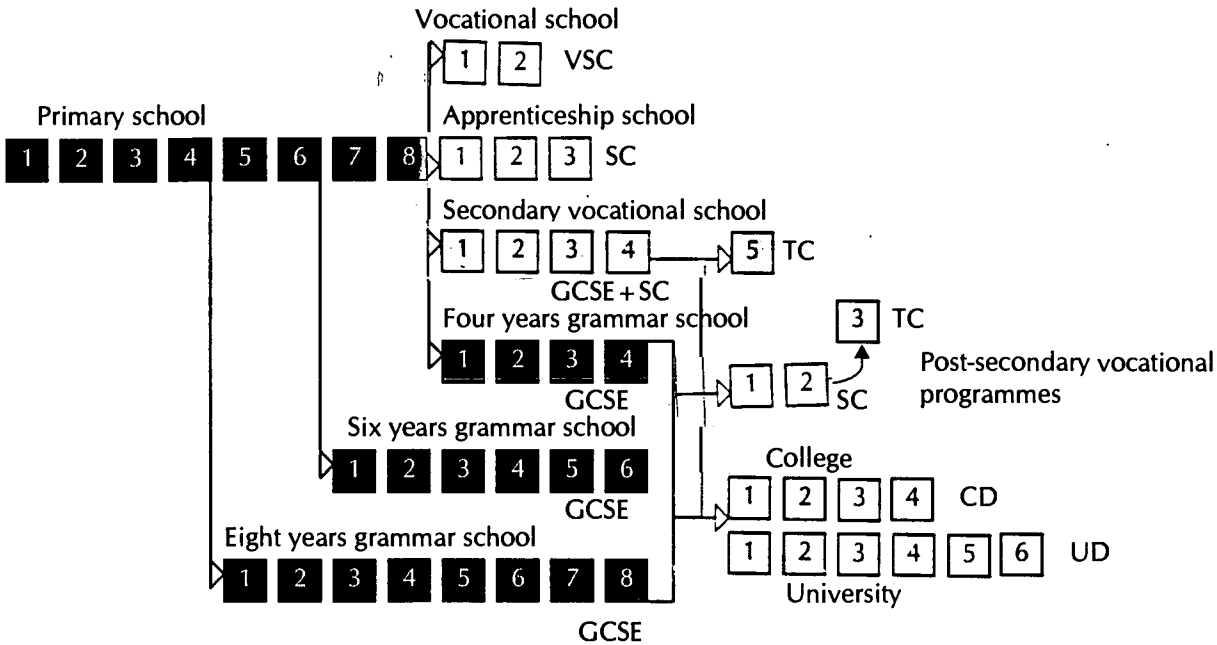
The workers' side consists of six trade union confederations
1. Autonomous Trade Unions' Confederation
2. Democratic League of Independent Trade Unions
3. National Association of Hungarian Trade Unions
4. National Alliance of Workers' Councils
5. Trade Unions' Co-operation Forum
6. Intellectual Workers' Trade Unions Association
The employers' side consists of nine employers' associations
1. National Federation of General Consumers' Co-operatives
2. National Federation of Industrial Craftsmen's Associations
3. National Federation of Retail Traders
4. National Association of Employers
5. Hungarian Chamber of Agriculture
6. Manufacturers' National Association
7. National Federation of Agricultural Producers and Co-operatives
8. Hungarian Industrialists
9. National Association of Entrepreneurs
The third side is the government (previously Ministry of Labour, now Ministry of Economy)
All three sides have equal rights

Annex B. Characteristics of the Hungarian education system

Figure B.1 shows the structure of primary and secondary school education which took shape at the end of the nineteen-eighties. This is the structure to which most of the school buildings conform in terms of construction, furnishing and equipment

- for primary schools: 8 years (2-3 classes per year) in 16-24 classrooms;
- for grammar schools and vocational secondary schools: 4 years (3-4 classes per year; 30-35 students per class) in 12-16 classrooms (not including gymnasium, laboratories, special teaching rooms, etc.)

Figure B.1 Present situation of Hungarian primary education and vocational education



1. Primary school – from the age of six	
2. Secondary education:	
- vocational school	VSC – vocational school certificate
- apprenticeship school	SC – skilled worker certificate
- secondary vocational school	GCSE and SC and/or TC – leaving cert. and skilled worker certificate and/or technician certificate
- four-year grammar school	GCSE – General Certificate of Secondary Education (leaving certificate)
- six-year grammar school	GCSE
- eight-year grammar school	GCSE
3. Post-secondary education	
- post-secondary vocational programme	SC
4. Higher education:	
- college	CD – College Diploma
- university	UD – University Degree

A young Hungarian is presented with the following educational career choices:

1. From age 3(-5), kindergarten
2. From age 6, primary school
3. At age 10: should he apply for entry to an eight-year grammar school?
4. At age 12: should he enter a six-year grammar school?
5. At age 14: should he go to a four-year grammar school, secondary vocational school, apprenticeship school or vocational school, which provides the last two years of the National Core Curriculum (NCC)?
6. At age 16: end of compulsory education; he can take the basic education examination, giving the general education certificate (GEC), attesting to completion of the NCC, or he can stay at school or go to another school (in the latter case the GEC is a basic requirement, and any of the forms of training below can be chosen): grammar school (prepares for higher education, provides school leaving certificate) or secondary vocational school (along with the GCSE, give basic professional education within an occupational family) or apprenticeship schools (giving vocational training of a lower level, but enabling entry into work) or vocational school, which prepares for a lower level of vocational qualification.
7. At age 18: the young person has one of the following:

- grammar school leaving certificate: he or she can enter higher education or secondary vocational school or can start a course providing a qualification required for a job or can start an accredited higher education course.
- secondary vocational school leaving certificate: he may enter higher education, can start a course providing special training in the sector he or she was awarded a certificate (in this case training is shorter than for those having only grammar school LC) or can participate in accredited higher vocational training, or can enter a secondary vocational school or a course requiring a leaving certificate, or can take a simple course to obtain a qualification necessary to enter a job.

Table B.1 Education institutions

Educational institute	1990/91	1996/97
Kindergartens	4,718	4,708
Primary schools	3,586	3,765
Vocational schools	109	242
Apprenticeship schools	308	363
Secondary schools	727	980

Source: The Hungarian Statistical Handbook '96 (CSO, 1997), in the section on Education, gives the following numbers of educational institutes.

Table B.2 Full-time students

Institution	1992/93	1993/94	1994/95	1995/96	1996/97 forecast
Kindergarten	393,238	397,153	396,184	399,339	394,140
- church	1,539	2,013	2,650	3,290	
- private	964	1,794	4,951	5,573	
Primary school	1,044,164	1,000,941	985,291	974,806	967,840
- church	11,260	19,449	23,315	28,695	
- private	2,500	2,507	3,299	4,126	
Grammar school	136,729	138,198	140,341	140,884	141,500
- church	8,905	10,992	13,277	13,892	
- private	1,125	1,512	2,110	2,192	
Vocational secondary school	186,225	192,388	196,965	208,415	217,000
- church	901	983	897	1,365	
- private	1,278	3,134	5,404	8,383	
Apprenticeship school	188,570	174,187	163,330	154,294	145,000
- church	147	211	152	514	
- private	952	1,006	1,547	1,886	
Vocational school	23,257	24,672	22,421	18,305	15,670
- church	27	295	1,095	576	
- private	1,107	1,099	1,044	1,136	
Special disabled education	39,873	40,940	41,696	42,629	42,600
- church	105	145	185	213	
- private	264	457	484	...-...	

Source: statistical indicators provided to maintainers of schools at the beginning of academic years; forecasts are from the MCE. General education, 1996/28., p.3-5.

Table B.3 Grammar-school dropouts

Year of entry	Last year of study	Starting students	Leavers	Dropouts	Dropout rate (%)
1987/88	1990/91	28,384	25,016	3,368	11.8
1988/89	1991/92	30,482	27,013	3,469	11.4
1989/90	1992/93	35,683	31,575	4,108	11.5
1990/91	1993/94	35,255	31,588	3,667	10.4
1991/92	1994/95	35,070	32,134	2,936	8.4
1992/93	1995/96	36,289	33,216	3,073	8.5

Source: Fejes Lászlóné: Statistical analysis of school-based vocational education (VET in Hungary 1996.)

Table B.4 Dropouts from secondary vocational schools

Year of entry	Last year of study	Starting students	Leavers	Dropouts	Dropout rate (%)
1977/78	1980/81	30,003	24,658	5,345	17.8
1982/83	1985/86	35,476	29,203	6,273	17.7
1987/88	1990/91	37,169	31,186	5,983	16.1
1988/89	1991/92	42,195	34,942	7,253	17.2
1989/90	1992/93	47,720	40,498	7,222	15.1
1990/91	1993/94	47,468	39,285	8,183	17.2
1991/92	1994/95	48,418	40,993	7,425	15.3
1992/93	1995/96	48,521	43,290	*5,231	*10.8

Source: Fejes Lászlóné: Statistical analysis of school-based vocational education (VET in Hungary 1996.)
** preliminary data*

Table B.5 Dropouts from vocational schools

Year of entry	Last year of study	Starting students	Leavers	Dropouts	Dropout rate (%)
1978/79	1980/81	54,670	42,368	12,302	22.5
1983/84	1985/86	65,112	51,098	14,014	21.5
1988/89	1990/91	73,026	56,223	16,803	23.0
1989/90	1991/92	80,239	61,956	18,283	22.8
1990/91	1992/93	77,192	59,520	17,672	22.9
1991/92	1993/94	69,557	54,867	14,690	21.1
1992/93	1994/95	62,202	49,231	12,971	20.9
1993/94	1995/96	58,897	47,073	11,824	20.1

Source: Fejes Lászlóné: Statistical analysis of school-based vocational education (VET in Hungary 1996.)

Table B.6 Dropout rates from secondary education, 1996, 1997 (%)

	1996 dropout rates		1997 dropout rates
ISCED 3:	Four year*	One year	One year
Secondary grammar school	9.26	6.4	3.7
Secondary vocational school	8.7	14.7	13.0
Apprentice school	31.2	11.8	14.4

Source: Statistical Report 1997/98, Ministry of Education and CSO and Key Indicators 1996-1997.

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